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THE CINCINNATI MEDICAL NEWS.

EDITED BY

J. A. THACKER, A. M., M. D., F. R. M. S., LOND.

Fellow of American Academy of Medicine, *Etc.*

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THE
CINCINNATI MEDICAL NEWS.

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ORIGINAL CONTRIBUTIONS.

Report on Surgery.

(Read before the Canada Medical Association September, 1882.)

BY FRANCIS J. SHEPHERD, M. D., C. M., M. R. C. S., ENG.

Demonstrator of Anatomy, and Lecturer on Operative and Minor Surgery, McGill University; Surgeon to Out-Patient Department, Montreal General Hospital.

MR. PRESIDENT AND GENTLEMEN,—I do not propose in this report to give an account of *all* the advances and discoveries made in surgery during the last twelve months, because I know from experience how tiresome and uninteresting such a recital of facts is. My intention is to touch on some of the more important and interesting points, so that they may serve as texts which may be elaborated in the discussion I hope will be aroused. The subjects I shall glance at will be as follows:—(1) Treatment of Wounds; (2) Cause of Inflammation; (3) Sponge Grafting and Bone Transplantation; (4) Surgery of the Kidney; (5) Treatment of Club-foot; (6) Surgery of the Joints. The list looks a formidable one, but remember that I only intend to furnish the texts, the sermons belonging to which I hope you yourselves will preach.

The Treatment of Wounds.—Within the last few years this subject has more than ever occupied the attention of surgeons, and has caused many acrimonious discussions. Old methods of treatment have been wholly discarded and new methods introduced, of greater or less value. Some of these are being constantly improved and modified, others flourish for a time, but when the *sun* of experience is turned on them, like the seeds which fell on stony

ground, they are scorched and wither away. At the present time, all methods, however much they differ in detail, aim at keeping wounds aseptic, and are in fact antiseptic methods of treatment. Listerism is only a phase of antisepticism, and does not differ as much from other methods as one would at first sight imagine. The great difference consists in the more gorgeous ritual and its obscuration by the clouds of incense (in the form of carbolic spray) which ascend heavenward as a propitiatory sacrifice to the great Æsculapius. The fundamental principles are, however, the same, viz.: cleanliness, asepticity, rest, support, and the accurate adjustment of cut surfaces; and to Mr. Lister principally we owe the universal recognition of the truth of these principles. He, in fact, by dwelling on their importance and evidencing their truth by the success of his own practice, has revolutionized the surgical treatment of wounds. He has shown that suppuration and the septic condition it leads to may be prevented. He has taught surgeons the necessity of thoroughly cleansing and disinfecting their instruments and hands before operation. At the International Congress held in London, the subject of the treatment of wounds was one of the most important that engaged the attention of the surgical section. From the papers read and the discussion which followed their reading, it was easily seen that the belief in the carbolic spray was on the wane, and that it was desirable that some form of dressing less complicated than Listerism should be employed. Mr. Lister himself spoke in qualified terms of the spray, and hoped at some future time to be able to say "*fort mit dem Spray.*" Professor Esmarch's wonderful statistics aided greatly in confirming the confidence of surgeons in rest, support, and infrequent dressings. Much evidence was offered, and many opinions were given which supported the views of Mr. Sampson Gamgee as to a dry form of antiseptic dressing. Since the Congress the dry method of treating wounds with infrequent dressings has made wonderful strides, and bids fair to supplant Listerism as a form of antiseptic treatment. Under dry dressings, wounds heal much more rapidly than under moist warmth, which encourages putrefaction. Iodoform dressings have been most generally used in Germany, but so recklessly that many cases of poisoning from it have been recorded. As much as 7 to 8 ounces have been stuffed into abscesses

and excised joints at one time. No case of poisoning has been reported from Germany where less than 3 drachms was used. Wherever possible I have employed the dry form of dressing, and I think with success. My method of dressing a fresh wound (for which I claim no originality) is as follows: After all bleeding has stopped, and the wound has been accurately closed by cat-gut ligatures, and when necessary by wire ones in addition, I sprinkle over the wound a little iodoform, cover this with a strip of oil silk (to prevent adherence of the wool), and then over all place a pad of boracic cotton. This is kept in place by an accurately adjusted gauze bandage, which must be evenly and firmly applied, so as to get the amount of elastic pressure required. If necessary, as in a limb, a pasteboard or other light splint (well padded) is applied. If the parts can be accurately adjusted by pressure, drainage is not required. The wound, if the patient complains of no discomfort, should not be disturbed for a week or more. When the dressing is taken down, the wound is generally found to be nearly or quite healed. In foul ulcers, this method I have found superior to every other. In some cases of accident, where the tissue is lost, or so much injured as to be beyond repair, I have generally employed the moist form of dressing till the slough has separated. Of late I have been using a solution of boroglyceride, as recommended by Mr. Barwell. This antiseptic, as far as my experience goes, is superior to carbolic acid. It has no odor, and is perfectly innocuous.

With regard to *Inflammation*, and its connection with septic organisms. The theory that you are no doubt most familiar with is that inflammation is due to the introduction of atmospheric germs into damaged tissue, and that if this introduction be prevented, the wound heals without inflammation. Prof. Hueter, Mr. Lister, Mr. Watson Cheyne, and others, have been the most able and efficient advocates of this view. There is, however, another, and I think a more probable explanation of the origin and spread of inflammation, of which Dr. Burdon Sanderson has lately in his Lumleian Lectures given a clear and convincing account, viz., that "inflammation, is the physiological effect of traumatism"; that the exudates of a normal inflammation are not infective; that no inflammation producing organisms exist in the atmosphere; that whenever inflammation becomes infective it owes that property to

chemical change in the exudation liquid which, in absence of any other better explanation,we attribute to the presence of septic organisms or bacteria or, in other words, exudative fluids which are infective owe that property to the exudative soil in which the germs grow, and that atmospheric germs are not *per se* a source of danger. Dr. Sanderson says these germs are not so much mischief-makers as mischief-spreaders—they have the power of developing what he calls a phlogogenic inflection, and of conveying it to all parts of the body. I do not propose to discuss this question, but merely place it before you as a subject for discussion, in its bearing on antiseptic surgery. Before passing on to another subject, I should like to draw your attention to some recent experiments by Dr. D. J. Hamilton on *Sponge Grafting*, and their bearing on surgery. Dr. Hamilton some years ago showed that the vessels of a granulating surface are not newly formed, but are simply the superficial capillaries of the part that have become displaced; that the granulation loops are thrown up by the propelling action of the heart. Whilst pursuing these investigations, Mr. Hamilton was struck with the similarity of the process of vascularization, as seen on a granulating surface, and that which occurs when blood-clot or fibrinous exudation is replaced by vascular cicatricial tissue. He states that blood-clot or fibrinous lymph plays merely a mechanical and passive part in any situation, and that vascularization is not due to the formation of new vessels, but rather to a displacement and pushing inwards of the blood-vessels of the surrounding tissues. He looks upon blood-clot and fibrinous exudation as so much dead matter, which affords merely a framework for the capillaries to ramify in, and proves that it is so by employing sponge to replace it. This sponge is prepared in a special way, and when placed on old ulcers he succeeded in organizing it—or rather filling its interstices with blood-vessels and cicatricial tissue, the sponge in the meantime disappearing by absorption. Many other experiments were made which fully proved his theory. Dr. Hamilton noted a significant phenomenon, supporting the theory that blood-vessels were pushed into the sponge in loops; when the convexity of a loop came in contact with the sponge framework, instead of one of its pores, a curvature formed on the vessel at the opposing point, and on each side of the obstacle there was pushed a secondary

loop similar to that from which both had arisen. These blood-vessels, according to Mr. H., bear with them great numbers of the actively proliferating connective tissue corpuscles from neighboring connective tissue, and these, and not the leucocytes, are the tissue-forming cells. Sponge Grafting, he says, is excellently suited for growing new tissue where that is insufficient to cover a part. Instead of sponge, charcoal or calcined bone might be employed in certain cases, as, for instance, where the formation of new bone is needed.

The *Transplantation of Bone* has been successfully accomplished both by Dr. MacEwen, of Glasgow, and Mr. McNamara, of Westminster Hospital, London. They had been pursuing their investigations on this subject at the same time, unknown to one another. Dr. MacEwen placed his case first before the public. He remade a humerus which had been destroyed by necrosis, by placing small fragments of bone (removed from patients with curved tibiæ) in a groove made in the soft tissues in the position of the humerus. Mr. McNamara successfully replaced a tibia which had become deficient from acute necrosis. He used portions of bone from an amputated metatarsus. The necessity for transplanting bone is necessarily rare, as nature is so skillful in the repair of bone, that the interference of the surgeon is seldom needed. These experiments carry out Mr. Hamilton's theory of organization, and are interesting from a surgical point of view.

The surgeon looks upon no organ or region now as sacred. Operations are at present daily performed successfully which, if even suggested a few years ago, the suggester would have been looked upon as mad. The lung has been partially excised, the liver has been cut into, and parts of it removed successfully. The whole stomach has been excised, and the œsophagus stitched to the duodenum, and many feet of intestines have been taken away, and the cut ends stitched together, patients making good recoveries. The renewed attempts at removal of the spleen have not been so successful as of old, but the whole uterus has been excised, even when pregnant, and the patient has survived, but this now belongs to the realm of gynæcology. The surgery of the organ which I am going to notice has, as yet, escaped the upward tendency of the gynæcologist, but how long it will remain in the domain of pure surgery I know not, as al-

ready one of its dependencies (the bladder) has been annexed in the female.

The *Surgery of the Kidney* has greatly engaged the attention of surgeons during the last twelve months. At the International Congress it was the subject of several papers, and caused much interesting discussion. Since then it has occupied considerable space in the Medical Journals, and the operations of nephro-lithotomy; nephrotomy, and nephrectomy have become recognized operations. It has been established beyond doubt that *nephrolithotomy* is a most successful operation in properly selected cases, viz., where the stone is of moderate size and single, and the kidney has not become disorganized. It is a most scientific procedure to perform this operation where stone has been certainly diagnosed by needle exploration, or where the pain and other symptoms lead one to believe there is a stone present. If left, the stone is certain to disorganize the kidney, cause much suffering, and probably death. The operation of incising the kidney (*nephrotomy*) has not proved a dangerous one, and it has been frequently demonstrated that the kidney can be easily explored through a lumbar incision, and even cut into with great safety. In cases of strumous or calculous pyelitis, the sacculated kidney can be drained through a wound in the loin, and the patient freed from the danger and pain of retained matter. Nephrotomy, as an operation, is merely palliative, and nephrectomy, or removal of the kidney, is a much more formidable operation than the foregoing. The dangers are greater, and many cases have been followed by suppression of urine. It has also proved fatal from hæmorrhage, and wounds of neighboring organs, as lung and pleuræ. As yet it has not been positively determined in what cases, or at what period, it should be performed. It has been done for tumor, cancerous diseases, and strumous and calculous pyelitis. It is a question whether before nephrectomy is performed, a preliminary nephrotomy should not be tried. Now the loin is the most favorable position for nephrotomy and, perhaps, the most difficult incision for nephrectomy, so this would be an objection. Some hold that if a preliminary nephrotomy is performed, it much increases the difficulty of a subsequent nephrectomy. Again, it is important, in considering the advisability of performing nephrectomy, to find out whether the pyelitis is confined to one kidney,

or, rather, whether the other kidney is healthy. Strumous pyelitis is rarely confined to one kidney, and, therefore, excision of the kidney must be a defective operation, as the pyelitis is only a small part of a general disease.

Th. Gluck has lately suggested a method of pointing out which kidney is diseased. He advises cutting down on the ureter of the supposed morbid kidney, and obliterating its lumen with ligature or clamp. A solution of some salt, rapidly excreted by the kidneys, is then injected subcutaneously, and its presence after a short time ascertained in the urine by means of tests; if none is found, then the other kidney is diseased, and the ligature should be removed and the wound sewed up; but if found readily, the operation of excision is proceeded with.

These are some of the difficulties in the way which make one hesitate to perform nephrectomy. Having, however, decided on the operation, which is the best incision, through the loin or abdomen? Certainly the abdominal incision gives the operator more room, and the surgeon sees what he is doing. Removal through an incision in the loin is very difficult, especially the ligaturing of the vessels entering the pelvis of the kidney, besides, in some people, the distance between the last rib and crest of the ilium is very short; in these cases, of course, the 12th rib has to be excised, or a T incision made, both of which procedures increase the risk of the operation. The only objection to the abdominal incision is that two layers of peritoneum are wounded; but nowadays we are not so fearful of wounding that structure as formerly. I leave the further discussion to you as to when and how we should perform nephrectomy.

Treatment of Club-foot.—As long as these deformities occur, so long will the remedying of them engage the attention of the surgeon. Ordinary simple cases may be successfully treated by bandaging and manipulating, or the use of elastic springs. More severe cases by tenotomy, and afterwards with the proper apparatus, plaster-of-Paris, splints, etc. I should like to hear from the members of this Association their opinion as to the performance of tenotomy, whether, for instance, in a case of talipes equino-varus (the most common form of club-foot), the tibial muscles and tendo-Achillis should be cut at the same time, or whether two operations should be made of the tenotomy. I feel inclined to favor the latter method,

following in the lines of the older authorities,—first, to remove talipes yarus by tenotomy, and after application of a splint, and later on, say in two or three weeks, to cut the tendo-Achillis, and place the foot in good position in a plaster boot or Scarpa's shoe. It seems to me that if the operation be thus performed in stages, the necessity for the more severe operations may often be avoided. I should also like to hear the opinion of the members as to the tendency to relapse. In my limited experience this tendency is great, if the after treatment by manipulation and splint is not for a long period continued.

Mr. Davy, of London, advocates in severe cases with tendency to relapse after tenotomy, that a wedge-shaped block of the tarsal arch should be removed by a fine saw or chisel; the base of the wedge is outwards, inwards, or upwards, according to where there is the greatest deformity.

Dr. Phelps, of Chatauguay, N. Y., has lately introduced a new operation for club-foot. He makes an incision across the sole of the foot, and divides all the resisting structures down to the bones. The foot is then brought into position on a special splint, and the wound left open. By brushing a stick of nitrate of silver through the bottom of the wound the granulations are prevented from springing up too rapidly, and the wound is induced to heal from the sides, and so contraction is avoided. I am afraid that I have already almost exhausted your patience, and so shall conclude this report by touching lightly on the *Surgery of the Joints.* Nowadays, joints are opened fearlessly, and often recklessly and unnecessarily. This, no doubt, is due to the success of antisepticism. At the International Congress this subject was very fully discussed, and the feeling among English surgeons, at any rate, was that most cases of joint disease could be cured by rest. They deprecated the early excision which was advised by continental surgeons, and thought excision should only be resorted to in extreme cases, and that in private practice it was rarely necessary. Since the Congress, a method of treating diseased joints by *Erasion* has come into vogue. Where the disease is confined to the synovial membrane, an incision is made in the side of the joint, an instrument introduced, and the diseased parts of the synovial membrane scraped away. The wound is then stitched up and a drainage tube inserted. Cases are

reported where, after healing of the wound, passive movement was commenced, and the patients recovered, with easily-movable and almost perfects joints. Where the disease commences in the bone, trephining and scraping out the diseased bone has been successfully accomplished, the patients recovering with perfect joints.

Konig, of Gottingen, in a paper on the tuberculosis of bone and joints, says the synovial membrane is rarely the primary seat of disease in tuberculosis cases, and that not even in the most favorable cases can any cure be expected from any therapeutical measure short of a surgical operation. The surgeon should aim at removing the primary morbid deposit in the bone, and then extirpate the diseased parts of the synovial membrane. In his after treatment he finds Iodoform of the greatest service. In cases where it is used the discharge is usually scanty, and the first antiseptic dressing may remain on for many days. He lays great stress on the point that the disease in the articular ends of bones should be removed before the joint is effected, and where it has already reached the joint, if the joint is opened early, the disease may be removed before the synovial membrane is affected.

I know that our worthy President is rather skeptical about these cases, and so great has been his success with excision, of the knee especially, that he prefers to adhere to the practice for which he is so well known. I merely present these methods of treatment to you for discussion, trusting that some new light may be thrown on the subject.

And now, Mr. President and gentlemen, I have come to the end of the subjects I proposed in the beginning of the report to touch upon. I feel that I have but poorly accomplished the task I set myself to do; still, I shall feel amply satisfied if you, with your matured wisdom and experience, will add your quota to the knowledge we already have of these subjects.

Report of the Committee on Medicine for 1881–82.

Two events have occurred during the past year which will cause it to be long remembered by the medical world. The first is the meeting of the International Congress in London last summer, and the second—and in many respects the more important—the recent publication of the discoveries in tuberculosis made by Koch, of

Berlin. With regard to the Medical Congress, little will be said more than that in every respect it was a grand success, worthy of the city in which it was held, and of the men who most actively promoted the scheme. The reports of the Medical Department alone are altogether too voluminous to be epitomized, and your Committee can only refer the members of this Association to the volumes already published, being assured that they will well repay perusal.

In this paper, however, the reader will confine himself to the second great event of the year, viz.: Koch's discoveries in tuberculosis, preferring to trace the progress of our knowledge with regard to one disease, rather than to go over the whole field of medicine. In our opinion the latter is given so fully in the annual reports of the *Medical Journal* as to render the reiteration unnecessary.

Tuberculosis is a disease which, for many reasons, is well worthy of our attention. It is by far the most fatal of all, not excluding cholera or plague. From statistics it has been shown that one-seventh of the world's mortality is due to it. Any new light, then, which may be thrown on its causation, or any new points as to treatment, are hailed with satisfaction by the practicing physician.

In order to obtain a more correct idea of the present state of our knowledge, it is necessary to make a study of the literature of the disease from the beginning. To do this, one might begin with Lænnec, whose treatise is a very remarkable one, considering the slim advantages he possessed compared with the pathologists of the present day. Many of his ideas, which for years had been departed from, have again been accepted, an ample proof of their correctness.

He included under the head of tubercle both the grey miliary bodies and the yellow cheesy matter, the result of inflammatory exudation, thus giving two forms of tubercle, the grey and the yellow.

Virchow, who commenced his investigations of the disease in 1850, limited the true tubercle to the grey miliary bodies, considering the yellow masses to be simply the result of a peculiar transformation of an inflammatory exudation. According to his teaching, in the earliest stages the tubercle is a small body, about the size of a pin's head, composed of lymphoid cells in a very fine

stroma. This body unites with others to form nodules the size of millet seeds. These latter shortly undergo a peculiar form of degeneration which he styled caseation. This process is marked first by a drying, and afterward a fatty, change. This is speedily followed by necrosis and softening. Other morbid conditions exhibit the form of degeneration as simple inflammation, carcinoma, etc. In none, however, does it occur so constantly or come on so early as in tuberculosis.

Our present ideas of tubercle do not materially differ from those of Virchow, except that in the center of tubercles large epithelioid cells have been discovered, which are called giant cells. Our knowledge, then, of the pathological histology of this condition may be summed up as follows: Tubercles are small nodules, the result of an inflammatory process, which are made up of giant cells surrounded by lymphoid cells contained in a very fine stroma. These bodies present the peculiar characteristic of early caseation. When we combine the two characteristics, first, that of possessing giant cells, and, second, early caseation, we have a form of disease which differs from any other, although either characteristic may be shown to a greater or less extent in other morbid conditions.

We will now pass on from the minute morbid anatomy to the etiology of tuberculosis.

Several years ago Villemin established by experiment the fact that lower animals when infected by tuberculous matter would themselves suffer and die from tuberculosis.

I need not give the experiments in detail, as they are no doubt familiar to most of you. It was demonstrated (1) that infection could thus be carried; (2) that the disease always followed the natural channels, affecting first parts near the point operated on; (3) that tubercular matter produced the same result, no matter from what organ or part of the body it was taken, whether from the lung, liver, testicle, etc.; (4) all animals were not equally susceptible—Guinea pigs and rabbits were easily affected, dogs, on the other hand, with difficulty; (5) the infection was successfully carried in several different ways—by inoculation, by the breath, and by feeding.

Prof. Cohnheim, in an address published in 1880 on tuberculosis, from the standpoint of the contagion theory, proceeds to explain the many forms of the disease found

in the human subject according to this doctrine. In adults, the lungs are the organs by far the most frequently affected primarily. The virus in minute particles is easily breathed in. In children, the bowels are most frequently affected, a fact which is probably owing to the presence of the virus in the food, perhaps in the milk of affected cattle.

The spread of the disease from one organ to another is also an evidence of the presence of virus. For instance, the lungs are first affected, then the bronchial glands, then the larynx is attacked from the infected matter passing over it. The pharynx follows in order. The œsophagus escapes, as the matter passes through with rapidity into the stomach. The latter organ escapes, owing to the antiseptic character of the gastric juice. When, however, a catarrh of the stomach takes place from the presence of so much irritating matter, the gastric juice loses its properties, and the virus passes through into the intestine, affecting first the mucous membrane and afterward the neighboring lymphatic glands and the peritoneum. There is no doubt but that the virus can also be carried by the blood to distant organs, the brain, for instance.

There are many points in connection with the hereditary character of tuberculosis, and of the manner in which the disease may remain dormant in the system, which might at first present serious difficulties to the doctrine of contagion. When, however, one compares the disease with syphilis, which is accepted on all hands to be contagious, many of these difficulties disappear. In the same way as the virus of syphilis is carried over from one generation to the next, may not the virus of tuberculosis be so carried, through the semen or ovum? As syphilis may be apparently cured, and suddenly break out again after years of freedom from it, does not tuberculosis also remain dormant, and from some sudden irritation again commence its ravages?

The very sudden outbreak of tuberculosis by which patients are sometimes carried off in a few days or weeks, is in all probability produced by the virus passing into the general circulation, from some caseous gland in which it may have existed for years. The writer has himself recently seen a case of tuberculosis in which the patient was carried off after nine days' illness, and in which almost every organ of the body was found to be affected

with tubercle. An old caseous gland was discovered near the root of the lung, which had no doubt been for months or years in existence.

When it is considered that Prof. Cohnheim collected and gave to the profession all these facts and inferences in an address made over two years ago, an address in which he prophesied the certain discovery of the virus, one is not surprised that the whole medical world should be moved with the deepest interest when Koch, of Berlin, demonstrated the presence of the bacteria, which, according to his ideas, are the cause of the disease. He, after two years of the most painstaking work, succeeded by a certain process of staining in bringing into view certain bacteria, which he could only find in tubercular tissue or sputa, and which he could readily distinguish from all other forms of bacteria. These bacilli, which will be demonstrated to you, are small rod-like bodies, about a third the length of the diameter of a blood corpuscle, and have a curved shape. They appear to be made up of spores.

Koch, in his investigation of tuberculosis, in both men and animals, scarcely ever failed to find the bacilli. He found them both in cases where the disease was produced by infection, and also where the disease was, so to speak, of spontaneous origin.

He made also experiments in which he inoculated animals with bacilli which he had cultivated in serum. The disease was produced in the same way as in his previous cases. It is not necessary to go further into the details of this paper, as you no doubt have all read it. One can not read it without being convinced that if he has made no mistake in his manipulation, he has discovered the real cause of the disease. That he has made such a mistake is not likely, as he is a most careful and painstaking inquirer. He has spent eight years in the investigation of bacteria, the last two of which were entirely devoted to the pathology of tuberculosis.

Since the appearance of his paper in the *Berliner Klinische Wochenschrift*, the attention of pathologists throughout Germany has been directed to this subject. Baumgarten, of Kœnigsberg, claims to have made the discovery before the publication of Koch's paper. He made a number of experiments which forced him to the conclusion that the disease was infectious, and that the

real cause could be discovered. Not the least interesting are the experiments in which he infected animals with a number of fluids, as ordinary pus, fluid of sarcomata, and carcinomata, decomposed pus, old dried blood, etc., without in any case producing tuberculosis. Ehrlich has in his investigations instituted a method of staining much simpler than that of Koch, and quite as effective. Take a test tube half filled with distilled water, add to it aniline oil until there is a slight cloudiness, then filter. To the filtered solution add fuchsine, an aniline color, until there is a slight cloudiness. Care must be taken not to add too much fuchsine, as the liquid will become clear again. In this way the coloring fluid is made. Now take some tubercular sputa, place a small drop on a cover glass, press another cover glass over it, so as to leave only a thin layer, and allow them to dry. When dry, pass them through a Bunsen flame, and place them with the sputa side downward in the coloring fluid, and allow them to remain in a half hour in a warm temperature. If the solution is cold, the glasses must be allowed to remain much longer. Now take them out and pass them through a solution of nitric acid in proportion of ten to twenty-six, wash out with water, dry, and mount in Canada balsam. I am indebted to Dr. Councilman, of Baltimore, for the minute particulars under whose direction, in Prof. Chiari's laboratory, the reader of this report has several times made the experiment. The rationale of the process is as follows: (1). The heating in Bunsen flame fixes the albumen on the glass, so that it is not removed by repeated washings. (2). After the staining, it is passed through a nitric acid solution, so as to decolorize the surrounding elements. The bacilli appear to retain the staining notwithstanding the strong acid. In this way one can almost always find bacilli in tubercular sputa, and they are never found in that of any other disease. As a means of diagnosis this may be a matter of great importance. There have been instances in which bacilli were found in the sputa of persons supposed to be suffering from typhoid fever, but when the *post-mortem* was made they were shown to have died of miliary tuberculosis. In our opinion, many cases have been put down as typhoid which have really been tubercular.

After describing the discovery of these germs, and the manner in which they appear to convey the disease, Koch

goes on to explain the phenomena of tuberculosis according to this theory. That the disease appears so frequently in the lungs is readily explained, as the germs are easily taken in respiration. These bacteria appear to be effective in producing the disease after long exposure. Koch succeeded in producing the disease by the inoculation of sputa four weeks old. Patients are not easily affected when the epithelium is intact, but when erosions or congestions take place, the germs find a ready entrance into the body. In children the bowels are most frequently affected, on account of the contagious matter introduced with the food. It is difficult to explain the hereditary nature of the disease by means of this theory. It is quite possible that individuals born with a weak constitution, and possessing a tendency to low inflammation, and cheesy degeneration, should be very susceptible to the virus of tuberculosis. The caseous matter appears to be an excellent nucleus for the development of bacteria. It is difficult to say whether the virus in some different form might not be carried over from one generation to another through the ovum or semen, in the same way as in syphilis.

From the experiments made, there is no doubt that bacteria exist in tuberculosis. So far as yet known they do not exist in any other form of disease. That they are the cause of the disease seems probable. No authority has yet been able to contradict Koch's assertion. In fact, the results of the investigations so far go still more strongly to confirm it. If, after thorough investigation, it should be finally confirmed, a great advance will be made toward the prevention of this frequent and fatal disease.

Selections.

New York Academy of Medicine.

Stated Meeting, October 5, 1882.

DR. FORDYCE BARKER, PRESIDENT, IN THE CHAIR.

The scientific paper of the evening was read by Dr. E. G. Janeway, and was entitled, "*Cases bearing on the Diagnosis and Localization of Cerebral Disease.*"

The author said it had been his intention to read a pa-

per bearing on localization and its difficulties alone, but on looking over the literature of the subject he found it had been so carefully and thoroughly, and with such detail, treated of by others, that he thought it better first to consider somewhat the subject of diagnosis of cerebral diseases from general diseases, and then relate some cases bearing on the question of localization.

Among the general diseases which most frequently presented difficulties of diagnosis from cerebral diseases were the fevers. First and foremost of these was typhus fever, on account of the marked cerebral symptoms attendant on it. The author knew of certain cases in which the death certificate had been written alcoholismus, meningitis, encephalitis, etc., when it should have been written typhus fever. The delirium, the stupor, the change in the character of the pulse, and especially the stiffness of the back of the neck, often misled one to make a diagnosis of meningitis, etc., when scarlet fever was present. Illustrative cases were given. The duration of the disease, the surroundings of the patient, the presence or absence of the disease in others in the same neighborhood, etc., were the means by which a differential diagnosis was to be made. There was an affection which might very much resemble both disease of the brain and typhus fever from the fact of the participation of the brain in the process in many cases; that was, acute ulcerative endocarditis. The detachment of soft masses from the valves of the heart and passing into the arteries of the body gave rise to the symptoms which might lead to the diagnosis of brain disease or typhus fever.

Typhoid fever rarely passed under the form of cerebral disease, owing to its longer forming stage, and usually tympanitic abdomen and diarrhœa. The physician might, however, sometimes be misled when there was an absence of the eruption and of diarrhœa, etc., or suppose typhoid fever to be present when there was only a typhoid state in connection with tumor, meningitis, etc., if the full history was not obtainable. He had on several occasions found the muscles tender, etc., and examined for trichinæ; and in others he had to exclude the possibility of basilar meningitis with certain symptoms.

Malarial diseases, fortunately, were not often mistaken for cerebral disease, but the converse was not true. Tumors particularly were apt to be attended with cephalal-

gia, and he had known it to be as periodic as tertain. The earlier stages of cerebral abscess or a meningitis leading thereto might be attended by both headache and hectic fever, which might so simulate malaria as to make the diagnosis possible only after a careful survey of all the symptoms and the history. Some of the severer malarial attacks, such as occur in tropical climates, might cause coma, etc., and lead to the suspicion of cerebral disease.

Pneumonia and pleurisy had been in many instances mistaken for meningitis and cerebral disease, the former much more frequently than the latter or pleurisy.

Bright's disease of the kidneys, more especially the contracted type, in various ways tended to mislead the physician. There was frequent accompaniment of cerebral hemorrhage. One could not depend alone upon the presence or absence of albumen in making the diagnosis, but he must take into consideration the hypertrophy of the heart, endarteritis, etc. Two very interesting cases were given in illustration, in one of which a lad sixteen years of age was supposed from the symptoms present to have basilar meningitis, but at the autopsy there was found to be ventricular hemorrhage, hypertrophy of the left ventricle, and disease of the kidney. The age of the patient, however, it was supposed, excluded kidney disease.

The question of locating cerebral disease must ever be one of interest to the physician. He had seen several cases which seemed to have a sufficient amount of interest to justify him in reporting them. While the symptom —that is, paralysis or spasm—came from irritation of the cortex, or from pressure or destruction of the cortex, and not from that of the subjacent fibres, yet it was seldom limited entirely to the cortex; and since the white fibres were supposed to be simply conductors from the surface, injury to them might also be of some value in rendering such conduction impossible.

One of the best cases he ever saw bearing on the question of localization was that of a man who was able to say only two words—*ja* and *nein*—the German for "yes" and "no." There was no paralysis whatever; no symptoms except those of aphasia and agraphia, the latter less. He had received an injury at the inferior anterior part of the left parietal bone, at which place there was a depression sufficient to admit the end of the little finger. The location corresponded to the posterior part of the third

frontal convolution. There was no improvement in aphasia during the two years he kept track of the patient, who was an intelligent man.

The next case was that of a man forty-seven years of age, who received an injury on the left temporal region. He fell and lay unconscious for ten minutes. Regaining consciousness, there was found to be considerable swelling at this part, but no wound; he could not speak; water flowed from his lips. There was no affection of the legs or arms, but there was paresis of the muscles of the right side of the tongue, and severe headache. He was unable to talk, and, while he could make letters, he did not place them in order in writing words. He knew the difference between the right and the wrong pronunciation of a word. The treatment consisted in quiet, cold, blisters to the back of the neck, laxatives, and iodide of potassium. He made a rapid recovery, and at the end of eight days was able to speak almost any word, but with considerable hesitation. At the end of six weeks headache, vertigo, the partial facial paralysis, and aphasia were almost completely recovered from.

The next case was that of a lad thirteen years of age, who, previous to the development of symptoms, had struck his head against objects on several occasions. Two weeks after falling and striking his head on a curb-stone, he began to complain of severe headache, the left leg became a little weaker than the right one, the left arm was also a little affected, and before long there was, perhaps, a little squint in the left eye, but there was no proof of it afterward. The headache continued, occurring three times a week, lasting most of the day. With these he would vomit what he ate. Involuntary starts also occurred in the arm, shoulder, and hand. After about four months sight began to fail, and in about six weeks he was almost totally blind. There were no convulsions, no affection of the bladder or bowels. The boy finally became completely hemiplegic, and three days before death he became partially comatose with fever. At the *post-mortem* examination a gliomatous tumor was found to occupy the site of the ascending central convolutions of both sides, projecting into the gyrus fornicatus, etc. Some softening, doubtless, accounted for the fever preceding death. The tumor involved white matter as well as gray.

In opposition to this, another case was related in which

no definite paralysis occurred, although there was a tumor of about the same size as in the former case pressing upon the temporo-sphenoidal lobe. The tumor grew from the dura mater.

The next case was that of a man, twenty-one years of age, who, after a stroke on the head, had left hemiplegia; no rigidity. He became almost comatose. On the next day he had three convulsions, during which there was frothing at the mouth, and he bit the tongue. There was no paralysis of the face or tongue. Sensation on the affected side was blunted. Trephining was performed at the seat of the injury, over the frontal lobe. A small spot of suppurative pachymeningitis was found, an explorative hypodermic needle was introduced, if possible, to find pus; but none was found. Afterward it was discovered that the pus was situated between the arachnoid and dura mater, held by the falx and the lobule. Beyond this, situated a little farther back than the first frontal convolution, was a small hemorrhage. They probably had entered that in exploring the brain, as one time they drew out a little black blood. This seemed not to have anything special to do with the motor phenomena. The whole surface of the membrane at the seat of the injury before mentioned was coated with pus and fibrinous exudation.

In one case, that of a man who had cirrhosis of the liver, there was paralysis of the sixth and ninth nerves on the left side. There occurred in that case what was said not to occur, namely, pachymeningitis hæmorrhagica, not to a great extent, but sufficient to affect those nerves. Two or three other cases were referred to.

DISCUSSION.

Dr. E. C. Seguin said it was somewhat difficult to take up so extensive a paper as Dr. Janeway's, which touched upon so many points. It was to him a very instructive paper—more particularly the first part of it, which dealt with the difficulty in diagnosis between general diseases which were accompanied by well-marked mental symptoms and ordinary cerebral diseases. He had seen a few such cases, and realized the extreme difficulty with which a conclusion was reached. More particularly had this difficulty been present in cases in which there was a combination of well-marked cerebral symptoms of renal de-

generation, and he thought that in these cases it was sometimes impossible to avoid a double diagnosis. He also referred to a topic perhaps a little outside of the scope of Dr. Janeway's paper; that is, with reference to the diagnosis of conditions of the system which were accompanied by nervous symptoms from actual disease of the brain and its membranes. He referred to the large number of cases of indigestion, a consumption of too much of the carbonaceous foods, etc., producing certain nervous symptoms, as headache, loss of memory, affections of the eyesight, etc., or such symptoms in general as belonged to the lithæmic state. He would not detain the Academy in discussing the second part of the paper. It would seem Dr. Janeway had been led to a favorable consideration of the problem of localizing lesions in the brain, a doctrine which Dr. Seguin had been a supporter of. He had made several diagnoses based upon a firm belief in the new physiology of the brain.—*Medical Times.*

Deafness or Impaired Hearing.

BY W. R. AMICK, M. D.,

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THE reason why we have selected this subject is, because it is a disease of a special organ that is not generally understood. It is a disease that affects persons in various ways. The child at school is punished by the teacher because he does not pay any attention to what is said to him. The teacher says that he is dumb or stupid. The lesson on the blackboard may be explained to him, and yet he does not understand it. He looks at the board or at the teacher, while the expression of his countenance would indicate, either that his thoughts were of the bat and ball, or else that he was not capable of comprehending the remarks. A child like this should not be treated too harshly. It may be that there is a defect of hearing that produces this apparent listlessness.

There is probably nothing, outside of diseases of the nervous system, that will produce a more stupid or listless appearance in a child that has once had good hearing than deafness; and adults are not entirely free from this condition.

Aristotle says that there is nothing in the intellect which is not first in the brain. The organ of hearing is one of the avenues to the brain, through which a great many of the ideas have to travel, as they are conveyed by means of sound. With the child at school this is the chief avenue to the intellect. Then when, from any cause, there is an obstruction which interferes with the function of this organ, it is not right to say that it is the fault of the child; that it is stupid and careless and should be punished.

The child may hear what is said one day, and the teacher recognize the fact, and the next day, under similar conditions, so far as distance and tone of voice is concerned, it does not understand what is said. The teacher then naturally supposes that this is due to inattention. But, after all, the child may be correct; for we know that in certain forms of deafness a person may hear better one day than the next. This is a noted fact in catarrhal deafness. On clear, bright days they generally hear better than in damp and rainy weather. The catarrhal form of deafness may be developed from a catarrh of the throat or nose. A great many people have an idea that nasal catarrh can not be cured. This is a mistake and a serious one sometimes, as many a person has lost his hearing simply because he neglected his nasal catarrh.

Deafness not only affects the child at school, but the adult. It is a serious inconvenience to a person's social position, and it is very unpleasant to be with our friends and keep constantly asking them to repeat their statements, or to speak a little louder. With strangers we try to hide our defects, and what we do not hear in a conversation we guess at it. Guess-work is as good as any, if we guess correctly. Some funny mistakes happen sometimes.

It is a recognized fact that certain occupations will cause an impairment of hearing. Especially is this the case where there is much noise, such as the rattling of machinery, escaping steam, and in machine shops where there is hammering on iron, etc.

Engine-drivers have their hearing impaired from this cause, yet, as they are entrusted with the lives of hundreds of human beings, it is necessary that they should have good hearing.

The following is taken from Prof. Moos' article on Rail-

road Accidents in connection with bad hearing of Engine-Drivers. (Archiv. Otol. Vol. XI, No. 2).

"Some hesitation may be reasonably felt in accepting this conclusion (viz., that as long as a conversation in ordinary voice can be heard, their defect involves no danger to the public). Surely the engine-driver is often dependent upon his ears for other information than that derived from a fog signal, or a starting whistle. Often an unwonted sound from some part of the engine, is the first intimation that something has gone wrong with the machinery, the early recognition of which might be of importance. The signals by which passengers can communicate with the engine-driver appeal to the ear, and a slight signal amidst the noise of the train might be unnoticed by men with slight defect of hearing, although capable of being perceived by the normal condition of this faculty. So, again, in such an instance as the Canonbury accident, in which the signal man states that he gave a word of caution to the passing driver, which the latter asserts he did not hear. Whether such warning was or was not heard, or its exact purpose recognized, might readily depend, in some instances, on the acuity of the sense of hearing in the driver. Railway systems are so complex and delicate in their organization, that those who work them need to have every sense in perfect operation. Pains have been taken to obviate the danger arising from color-blindness, and it is certainly desirable that investigation should be made to ascertain how far the effects on the hearing of engine-drivers produced in Germany, are produced also in this country."

The following case was examined by Prof. Moos himself and is given in his own language.

"Andreas Schneider had been an engine-driver for seven years, was stationed in Karlsruhe and had never been on a road where there were tunnels. He consulted me on January 19, 1882, and related the following: On December 23, 1881, while on the journey from Karlsruhe to Rastadt, a cock was blown out by the steam at 5:30 A. M.; on account of this there was a terrible hissing at the locomotive, in order to stop which, the fire had to be taken out of the furnace. "After I had done this we started toward Offenburg. During the first half hour I had severe pain deep in both ears, which then passed off and did not return." He said he had noises in both ears, like the

chirping of a cricket, but more on his right side than on his left, which continued up to the time of consultation. From Rastadt to Offenburg he did not hear the pumping noise which the engine makes in forcing the water from the tank into the boiler, so that the engine-stoker had to attend to this duty for him. He could not do it himself until daylight came. Even then he could not hear the noise of the pump, but by means of his vision he could see that no water was lost while the pumping was going on. Since this time, has not been on the engine."

The examination showed that he had a defect of hearing for some time. The accident to the locomotive probably caused some labyrinthine disease which, would account for the sudden occurrence of deafness in the extremes of the register which existed.

It seems like an unkind dispensation, when a man, after years of conscientious and faithful performance of duty, has become deaf from the nature of his occupation, to be discharged on account of it. But, if his position is one in which the lives of others are entrusted to his care, and the requisite protection can only be obtained by one who has normal hearing, then the conclusion is easily drawn.

To simply say that a person is deaf is a very indefinite way of describing his condition. It includes all of the grades from a slight impairment of the faculty of hearing, to absolute deafness. It will be necessary then to use some term that will express, approximately at least, the degree. The following will be found very convenient: Impaired hearing; Decided impairment; Profound; and Absolute.

We might make the explanations as follows: We will take an ordinary watch, that can be heard with a normal ear at fifty inches. Then when in a given case the watch has to be approximated close to the ear before it can be heard, then we have an illustration of impaired hearing. If the watch can not be heard unless it touches or is pressed against the auricle, then we have decided impairment. If the watch can not be heard when it touches or is pressed against the ear, and the loud voice or loud noise, can be heard, then we have profound deafness. Where the faculty or power of hearing has been destroyed and is entirely gone, then the deafness is absolute.

The degree of impaired hearing can be estimated by testing and expressing in inches the distance that the

watch is heard. If a watch can be heard by a normal ear at fifty inches, and the ear under examination can only hear it at twenty inches, we say that hearing is twenty-fiftieths, written in the form of a fraction.

The watch is also the test that is used when we wish to determine whether the deafness is due to disease of the sound-conducting portions of the ear, and to further ascertain whether bone-conduction increases the hearing power. If it does, then some of the artificial aids to hearing, that depend upon bone-conduction, may be used to an advantage.

Recent Progress in Obstetrics.

W. L. RICHARDSON, M. D.

Significance of Albuminuria.

Dr. Ingersley contributes a valuable paper in which he attributes the great discrepancy among writers to the fact of the insufficient numbers they have based their conclusions upon. According to his own observations he found albuminuria occurring in 29 out of 600 cases. In only 7 of these were casts found in the urine. One of these had been a sufferer for some time from Bright's disease. The proportion of albuminuria was the same in multipara as in primipara. He is unable to offer any reasons for the occurrence of albuminuria during pregnancy.

During parturition the writer has seen albuminuria in 50 cases out of 153. In only 15 of these has albumen been discovered before the beginning of labor. All causes which give rise to a protracted labor favor the occurrence of albuminuria. The albumen disappeared within 48 hours in 80.5 per cent. In those cases in which eclampsia occurred there was an unusually large amount of albumen, and casts were found in all such cases. The albuminuria found in cases of eclampsia is always of renal origin, of an acute nephritis.

Application of Forceps at the Superior Strait.

M. Obissier discusses the application of the forceps at the superior strait, speaking first of the difficulty and danger of its application above this point, while the head is still movable. Realizing this, version is often to be preferred, especially in a retracted uterus. In such cases as

eclampsia, hemorrhage from a dangerous insertion of the placenta, and some other emergencies, he considers the forceps alone equal to the conditions. Hatin's method of application is generally to be preferred, which consists in introducing the left hand in forced supination into the uterus upon its left side, then passing the left blade along it as a director. The hand is then changed to half pronation, being passed behind the head to the right side of the uterus, and the other blade passed similarly to the first. This is more difficult in execution than in description, and as a substitute the author recommends a method which he has himself adopted. The author being in the classical position, the left hand is carried high up, as if right blade of the forceps were to be supplied. The head is fixed as firmly as possible with the fingers of the introduced hand placed between the head and the uterus. The left blade of the forceps, well oiled, is then passed with the right hand, being gradually worked into position along the left hand as a director, its convex surface following the palm, and readily adapting itself on the left side of the uterus to the fœtal position. The left blade being in position, and held by an assistant, the right one is passed in the same way to its proper position. The chief advantages claimed are that the operation is done with small expenditure of force, the head remains fixed during the entire process, and the operator's arms are not crossed as in Hatin's method.

Hour-Glass Contraction of the Uterus.

Dr. F. Barnes reports a case in which he was called to see a patient who had been delivered by a midwife seven hours previous. The placenta had not come away. A dose of ergot had been given, but with no effect so far as producing any expulsion of the placenta. The external os was dilated, as was also the cavity of the cervix. The internal os and the ring of Bandl, just above it, were firmly contracted. It was impossible to introduce the hand within the uterine cavity. Remembering the property possessed by nitrite of amyl of relaxing the tension in blood-vessels, he gave the patient three drops of the amyl on a handkerchief to inhale. During the inhalation the muscular fibres surrounding the internal os gradually relaxed, and he was enabled to pass in his hand and remove the placenta, which was universally adherent. No

hemorrhage followed. The case was interesting, as showing the danger which is liable to follow the administration of ergot before the expulsion of the placenta; it being impossible to know beforehand whether the placenta is subsequently to be found adherent. Should it be attached, the administration of ergot, if followed by any physiological action, must be to produce the very result most to be dreaded—a firmly contracted uterus inclosing an adherent placenta. It is in such cases that Dr. Barnes believes we shall find nitrite of amyl of great value. It relaxes the irregular contraction of the uterus, and acts as a sedative and anæsthetic without producing unconsciousness.

Use of Iodoform in Obstetric Practice.

Dr. Rehfeldt reports a case in which a patient was attacked with puerperal edometritis on the fourth day after a normal labor. The uterus was washed out with a two per cent. solution of carbolic acid, and an application made to the interior of the uterus of five grains of iodoform. A marked improvement was at once noticed; the lochia becoming normal, the pulse and temperature falling. The occurrence of several abscesses, occasioned by the position of the patient, delayed the convalescence, which, however, progressed rapidly as soon as the abscesses were healed.

Dr. J. Mann strongly advises that all wounds along the course of the generative tract should be washed with a carbolized wash and then sprinkled with powdered deodorized iodoform, over which iodoform wadding should be applied. In this way he claims that the absorption of septic material is prevented. Under such applications granulation goes on very rapidly.

Use of Salicylic Acid in Obstetrics.

Dr. G. Bayer recommends that the vagina be carefully washed out with a weak solution of Condy's fluid, and then that a mixture of salicylic acid and starch (one part to five) be thrown into the vagina. This treatment has been found of great advantage in the Stuttgart Lying-in Hospital.

Nitrous Oxide as an Anæsthetic in Obstetric Practice.

Dr. Klikowitsch reports the result of a series of experiments of nitrous oxide, used with a view of relieving

pain during parturition. He considers it absolutely free from danger to both the mother and child. It has no influence in retarding or hastening the progress of the labor. It acts equally well during either stage of labor, so far as relieving pain is concerned. The patient is not rendered unconscious, and hence is able to use the abdominal muscles to assist in the expulsion of the child. It never produces vomiting, but, on the other hand, checks it, if it is present. It is not followed by nausea or headache. The anæsthesia may be kept up during the whole course of the labor, as a few whiffs before each uterine pain is sufficient to give relief from the suffering. In his experiments Dr. Klikowitsch used a combination of thirty per cent. nitrous oxide with twenty per cent. of oxygen. —*Boston Medical Journal.*

An Old System and a New Science.

BY F. E. STEWART, M. D., PH. G.

In this paper I desire to call attention to a system that is seriously retarding progress in the science of medicine, and to suggest a new system to take its place, devised to promote progress therein. The system under condemnation is that known as the patent or proprietary medicine system. This trade is, at the present time, making a bold attempt to absorb pharmacy and therapeutics, and to usurp the prerogatives of the Medical and Pharmaceutical professions. The suggestion is that the study of drugs, and their preparation and application, be recognized as a science, under the term Pharmacology, or the science of drugs, and that the professions of Medicine and Pharmacy should co-operate in such measures as are likely to raise the standard of knowledge in this branch of science, and to elevate it from the low level to which it has fallen. By so doing, it is hoped that pharmacy may be placed on a scientific basis, as a part of the science to which it belongs, and the Medical and Pharmaceutical professions brought into harmonious relations. This classification of Materia Medica, Pharmacy, and Therapeutics, under the general term pharmacology is an old one, but it has either been forgotten, or not brought out with that prominence that its importance deserves.

Wood defines Materia Medica as "the substances employed in medicine," Pharmacy as "the art of preparing medicine," and Therapeutics as "the application of medicine to the cure of disease." And he also says that these branches are so closely connected as to be embraced under the general term Pharmacology. This close connection is also recognized in the making of the Pharmacopœia, which was originally compiled, and is decennially revised by a committee representing both professions. This subject, referring as it does to the Pharmacology, and the United States Pharmacopœia, is, therefore, a matter of interest to the Medical profession, and not out of place in the discussions of the American Medical Association, as some would have us believe.

An intimate knowledge of the materia medica is indispensable to the true education of the physician. This branch, however, is very much neglected by modern teachers in medical schools, and students leave our medical colleges who have never seen either the drugs, or their preparations, that are to form their armamentarium in future years. Is it any wonder, then, that therapeutics are so far behind other branches of medical science? The result of this want of knowledge upon the part of the profession has led to much of the skepticism that exists at the present time with regard to the action of drugs, and to it may also be traced many of the abuses that are so seriously injuring the medical profession. The success of the proprietary medicine system can also be traced directly to this cause. If it were not so, the patent medicine trade would never have been able to so nearly absorb pharmacy as it has done in the past fifteen years.

A good illustration of the low ebb of medical education in the direction of pharmacy, in this country, is furnished by an incident which happened recently in one of our neighboring cities. At a meeting of the County Medical Society, a member, prompted by a remark made by the writer, asked the question, "What is the difference between a tincture and a fluid extract?" Astonishing as it may appear, not a gentleman present, and among them was numbered a professor in a well known medical college, could answer this simple question correctly, and some of the answers given showed an utter want of knowledge of the first principles of pharmacy. Nay, more; a certain president of one of the leading colleges in the West took

the position in a recent conversation that I had with him, that the Pharmacist occupies the same position to him in a medical relation as his cook occupies in the culinary art. In either case, he does not pretend to know anything about the art, and as long as his servant does his duty by furnishing him good food, or good pharmaceuticals, as the case may be, for the way that he prepares them he cares not a straw. The results of such doctrines will account for the deplorable condition to which education has descended in Pharmacology.

We have two professions working in the field of Pharmacology and known respectively as the Medical and Pharmaceutical professions. The Pharmacist investigates drugs to ascertain their origin, physical appearance, microscopical and chemical structure, and other properties which they may possess, so that he can properly select, prepare, and dispense them. The work of the Medical profession in this field is the investigation of the application of drugs to the cure of disease. The interests of the proprietary medicine trade are diametrically opposed to those of either the profession of Medicine or of Pharmacy, and to the science of medicine. It is an unscientific system, and its whole scheme is the locking up of knowledge for trade purposes. A proprietary medicine is an alleged remedy, the descriptive name of which is claimed as a trade-mark by the manufacturer, who thus monopolizes its manufacture and sale. Most of the proprietary medicines are of secret formulæ, but those advertised to the medical profession purport to be open to scientific inspection. The fact, however, is that the working formulæ are not published, and the art of their manufacture is only known to their proprietors. Any attempt of a competitor to market them is always resisted by due process of law, and the result of this system is that the knowledge of pharmacy is being rapidly locked up by a few trade houses, and the preparation of medicine has become a monopoly. By preventing competition it is possible to create an artificial demand for these imitation pharmaceuticals by ascribing to them marvelous virtues which they do not in fact possess, and at an exorbitant price, by highly colored literature, and florid advertisements. The Medical profession are tricked into furnishing certificates as to their value in treating the sick, without that careful investigation of their secret of manufacture, and of their

reputed properties, necessary to justify an opinion; and then the whole advertising machinery is turned to creating a demand among the people under the sanction of the medical profession.

By this proprietary medicine practice, compounds of drugs of every-day use are placed on the market under fanciful names, the sole use of which is monopolized by the manufacturers. With the large margin thus made possible there is a lavish use of printer's ink, and we have both professional and secular journals, and the religious press as well, filled with advertisements of bronch*ines*, gastric*ines*, and gonorrhœa*ines*, and a host of other compounds, of equally scientific names, with the fashionable *ine* termination. The ultimate purpose or end of this class of remedies is direct advertising to the people in the religious, literary, and secular press, under the physician's sanction and recommendation. This form of proprietary medicines thus becomes the most formidable and dangerous rival to the Physician and the Pharmacist, both professions being robbed of patronage, which is adroitly wrested from them by the patent medicine trade.

Doctors who prescribe this class of pharmaceuticals prescribe themselves out of practice:

1. By enabling the patient to prescribe the same article or similar preparations for himself in the future, and thus dispense with the physician's services.

2. By encouraging the patient to purchase direct from the druggist, who can hardly be blamed for furnishing supplies according to the demand thus created.

3. By patients recommending the ready-made remedy to their friends afflicted in any similar manner, who also treat themselves henceforth without the aid of a physician. One prescription may in this manner sell dozens or hundreds of bottles which the physician did not prescribe, and for which he receives no compensation.

4. By the business monopoly and prosperity accruing to the manufacturer, if the remedy affords relief or cure. In this case the manufacturer secures the credit of the cure: but if the remedy fails in the first instance, the censure is ascribed to the doctor for prescribing it, and confidence in his professional skill is correspondingly depreciated.

The effects of the proprietary medicine system on the pharmaceutical profession, and on medical science, are best illustrated by the following cases which have

happened during the past year. The first one is the celebrated international case of Allen & Hanburys, of London, against Parke, Davis & Co., of Detroit, and the other was the case of Willis A. Gregory and Willis G. Gregory against Bodenback, of Buffalo, N. Y. Both were for alleged infringement of trade-mark. In the first mentioned case the prosecution were defeated and withdrew the suit, in the latter, however, a compromise was effected contrary to the interests of scientific medicine.

Idiocy with Paralysis and Congenital Aphasia; Atrophy of Convolutions.

BY JAMES SHAW, M. D.

G. L., admitted second time March 1, 1880, æt. 18. First admission, Feb. 19, 1877; was then described as having both legs flexed, and right arm flexed and useless. Could feed himself with left arm. Unable to express himself except by screams and howls. Very passionate. A month afterwards was said to be easily amused, and generally happy. First record of an epileptic seizure occurs about the beginning of July, 1877. In the medical certificate on which he was readmitted, March 1, he is said to have been very noisy, frequently shouting and yelling, and also dirty and destructive in his habits. Condition within a week after admission: he is small for his age, and deformed, with both lower extremities paralyzed and contracted, and right arm in a similar condition. Circumference of head 20 inches. Pupils dilated but equal. Makes an inarticulate noise, but can not speak. Took food reluctantly at first, but takes it well now after having an enema. Knows his name, and when asked where the "baby" is, beats his deformed right hand with his left. Responds to the name of "Georgie" by facial expression and inarticulate sounds. July 2. Has gained flesh, and is more cheerful in expression. Takes notice of surrounding objects, and is jealous of another idiot boy. April 2, 1881. Is much thinner and more haggard, and has symptoms of acute phthisis, but no cough, expectoration, diaphoresis, or diarrhœa. Taking extra diet, tonics, and cod liver oil. Cries, and moves his head from side to side when annoyed. June 17. Eyes large, and affected at times with move-

ments resembling nystagmus. Both legs contracted; thighs flexed on abdomen, legs flexed on thighs, feet normally placed with regard to legs. Right arm contracted, with shoulder and elbow joints stiff, forearm being flexed on upper arm rigidly; wrist flexed on forearm; can move fingers a little; arm remains stiffly against side; can move left forearm, hand, and fingers freely; can not, or does not, extend forearm or arm fully, and movements at the shoulder are restricted. Limbs all emaciated. Vomiting at times. Apparently sees and hears well. Seems to have a friendly regard for one of his fellow-patients; prefers being fed by him, and makes an inarticulate noise, as if to express pleasure, when addressed by him.

Lower limbs drawn over to the left side, and trunk deformed, the thorax being flattened on right side. Lies on his back, inclining to the left side. Cutaneous sensibility retained. July 2. Very thin and feeble, and takes food reluctantly and sparingly. July 5. Very pale and feeble, and almost incessantly whining. Died July 10, 1881, of phthisis.

Autopsy. Body emaciated and very small, having the appearance of that of a child of seven or eight years. Lower extremities very firmly contracted, and drawn over to left, and would not assume the straight position on the application of force, even after tenotomy had been performed. The right side of the chest was shallower, and had the appearance of being more superficial than the left, in the supine position. Thorax: Right lung small and tuberculous in its whole extent, with a large cavity near the middle (from base to apex). Left lung tuberculous at apex. Fluid in pericardium. Heart small. *Cranial cavity.* Arachnoid opaque. Cerebrum small. Cerebellum proportionately large.

	Weight.
Left Hemisphere of Cerebrum	4,598 grs.
Right " "	5,640 "
Left Half of Cerebellum	1,078 "
Right " "	1,050 "
Pons and Medulla	361 "

Total weight of Encephalon free from membranes....12,727 grains.

I. Left cerebral hemisphere. Ascending parietal convolution very short, and reduced to a ribbon-like band, except about three-quarters of an inch superiorly. Ascending frontal atrophied for about half an inch of its

extent, commencing a quarter of an inch from its inferior extremity. Third frontal atrophied in all its extent, and very small. Lower ramus of the second frontal atrophied for about an inch, commencing a quarter of an inch from the ascending frontal. Temporal lobe deformed. First temporal convolution (anterior half) forms only a thin lip to the fissure of sylvius, second temporal also atrophied anteriorly. In consequence of the convolutions above and below it being atrophied, or arrested in development, the Island of Reil was abnormally exposed.

II. Right cerebral hemisphere. Convolutions much more massive than in left. Ascending parietal, otherwise massive, reduced to a ribbon-like thinness for an inch, commencing about an inch from its superior extremity. Occipital convolutions apparently less extensive than those of left hemisphere. Central ganglia much larger than those of the left side. Crus, pons, and pyramid less developed on left side.

Remarks: In this case we find almost complete dextral hemiplegia concomitant with extreme atrophy of the left ascending parietal convolution; aphasia with atrophy or arrest of development of the left inferior frontal; left crural monoplegia with atrophy of a portion of the right ascending parietal; absence of sexual instinct and power of locomotion; existence of seemingly normal vision and hearing; power of moving eyes freely in all directions, with large and relatively very large development of the cerebellum.—*Jour. Mental Sci.*, July.

A Case of Intussusception with Recovery.

BY S. W. LANGMAID, M. D.

At the last meeting but one of the Section a fatal case of intussusception was reported by Dr. Rotch. The next day, March 10th, I was called to a female child of five months, who was the subject of the same accident. The infant had always been well, and had not been particularly constipated.

I saw her on Friday. She had been well until Tuesday night, when she was restless, desiring to nurse often, but rejecting the nipple immediately. The next day she vomited, and cried out at intervals as if from severe pain. At

noon she began to have bloody discharges. The pain and bloody discharges continued until I saw her on Friday. She appeared stupid. The pulse was 120. The abdomen was not distended or tender to pressure. The finger, inserted its whole length in the rectum, encountered a tumor with a central indentation, reminding one by its shape of the neck of the uterus.

Dr. Summer saw her with me two hours later.

A cylindrical tumor existed in the region of the descending colon. The invaginated intestine had come down to the anus, and, holding the child in the inverted position, was seen to be of a chocolate color. The duration of the lesion, forty-eight to sixty hours, and the appearance of the bowel, decided us against any mechanical interference. The condition of the child remained the same, except that the discharges of the blood became less frequent and smaller until Sunday night, when the patient became brighter, nursed, and retained the food. On Monday there were two natural dejections, the tumor had disappeared and the child was well.

I suppose the different result of this case from that reported at the last meeting was due to the situation of the lesion.

Dr. Whitney says that in the palliative treatment of intussusception a spontaneous cure is observed in fifty per cent. of the cases. It seems to me that the prognosis must depend very much upon the situation of the intussusception. If it occurs in the small intestines, and especially if the ileo-cœcal valve is invaginated, the chances of spontaneous cure would be less than when the descending colon is the region involved.—*Boston Medical Journal.*

Pneumonic Phthisis.

BY WILLIAM PEPPER, M. D., PHILADELPHIA, PA.

The patient, 23 years of age, single, by occupation a sewing girl, was admitted to the hospital on the 19th of February. She told us, when she came here, that she had already lost two sisters from consumption, but that she herself had always been entirely healthy until about a year before the time of her admission. She dated the beginning of her sickness back to a day when she became

very much overheated, and was immediately afterwards chilled through. Following this plain history of an acute beginning, came cough, pain in the right side, and fever. There was no spitting of blood at first. There was some loss of flesh, but according to the patient, neither the pain nor the loss of flesh were persistent symptoms. Five months ago the woman caught a fresh cold, and since that time her monthlies have not made their appearance. Lately the loss of flesh has been more marked, and there has been greater depression and weakness than was previously the case. Even in the past five months, however, none of her symptoms have been as pronounced as might have been expected. Her case has been subject to very marked occasional remissions and exacerbations of intensity. Since she caught the second cold her cough has been more persistent, and the sputa more abundant, taking it all in all. Nevertheless, no one would suppose, from outward appearance, that the girl was suffering from any grave disease. Upon admission, her temperature was 101°, her pulse 118, and her respiration 24. She was quite feverish. The patient was evidently, at the time, laboring under an acute exacerbation of the disease. Her urine was high colored, but the most careful examination failed to reveal the presence of any sugar, or of any albumen. Physical examination of her chest very soon convinced me that there was a cavity of unusual size in the right lung. Auscultation revealed metallic respiratory murmur, with occasional metallic tinkling sound. When the patient talked in a loud tone, or, better still, when she whispered, there was distinct amphoric echo of the breath sounds. These signs were conclusive in pointing to the existence of a very grave pulmonary lesion on the right side. The other lung, at the time of first admission of the patient, was perfectly healthy, except at the apex, where the percussion note was duller than should be, and the respiratory murmur was somewhat harsh. Of late, I have had occasion to remark once before, the girl had expectorated a great deal of muco-purulent matter, which is very frequently tinged with blood. The resident physician, Dr. Collins, says that the sputa must amount to a pint, or over, in the course of the twenty-four hours. On some few occasions, quite recently, the matters expectorated have had quite an offensive odor. We have treated the patient with cod-liver oil, the syrup of the hypophosphites,

small doses of arsenic, and plenty of good nourishing food, up to within the past week or so. Under this *regime* she has shown the most extraordinary improvement. She gained five pounds in weight almost immediately, and began to look well and rosy. Her breathing became less oppressed, and her fever went entirely away. Her temperature was steadily in the range of the nineties—never running above 99½°. Had any one of you gone into the wards at that time you would have asked, "What is this healthy looking, active girl doing in the hospital?" This was her condition until about a week ago, when she grew pale again, and her temperature began to show a marked tendency to rise, mounting up, once, to 101°. There was still the most marked metallic respiration on the right side. The percussion note was, on the other hand, very likely to mislead one not trained in noting small differences of sound. It seemed of perfectly normal pitch, but on comparing it with that elicited from the healthy lung, it sounded amphoric—almost tympanitic in pitch. When the girl spoke in loud tones, or whispered, a distinct metallic echo could be heard. The physical signs, in fact, seemed to be much the same as those which were elicited at the date of admission, except that they were now and then obscured by a loose bronchial rale. The left lung still showed some dullness at the apex, with hard respiration. While, however, the physical signs had remained almost entirely stationary, the rational signs had undergone a most marked exacerbation.

The significant cause of the physical signs was undoubtedly that there was an enormous cavity in the right lung, destroying nearly all of its tissue, while the left lung was but little diseased. The cavity in the right lung is certainly the largest which has ever come under my notice.

The question now arises, How was this cavity produced? Is the case strictly one of gradual destruction of lung tissue, as in tubercular phthisis? I think not. I should rather ascribe the present condition of the right lung to a latent pneumonia, which led in time to pneumonic phthisis. The lung was the seat of a cheesy degeneration; then there followed the breaking down of the softened lung tissue, leading to the formation of a cavity. The history of the case favors, I think, this view—the acute beginning, the extensive disease of one side of the lungs, and the slight affection of the other side. The right lung to-day

is almost liquefied. We might, indeed, call this case one of pulmonary abscess, were it not for the local irritation set up and for the very evident constitutional tendencies. The left lung slightly tubercular at the apex. The right lung has been destroyed by a pneumonic action.

I want to call your attention to the great disproportion between the rational symptoms and the physical signs of the disease. I very often see just such cases as this one. Of course the physical signs disclose the true nature of the case and the true extent of the disease, but it does not do to base your prognosis upon the physical signs, in such an instance. I desire to illustrate a very nice point of prognosis from this case. *In a case of pneumonic or tubercular phthisis, where the general symptons are favorable, i. e., are not grave, while the physical signs, on the other hand, point to the existence of very serious disease of lung structure, the prognosis will turn upon the showing of the general symptoms, rather than upon that of the physical signs.* To give more particular force and point to this general rule, I would say that in this case the indications of general good health would lead me to say confidently, although the physical signs are such as they are, that the disease is likely to remain comparatively latent, that the fatal issue, though certain, is likely to be postponed for some time to come. *So long as the general health is comparatively good, the lung disease is likely to remain more or less stationary.* The events of the last few days may change this present view of the case. If the fever and cough increase, and night sweatings and dyspnœa, with general loss of flesh and strength, make their appearance, I shall know that the tubercular disease of the left lung apex is increasing, and, of course, modify my prognosis accordingly. At present (I wish you to understand me thoroughly) I say that the ultimate prognosis is bad, very bad, but that death, though none the less certain, may be more or less delayed owing to the comparative latency of the disease in the left lung.

How are we treating the girl? We have been giving her, and we shall continue to give her until the temperature becomes normal, Niemeyer's pill—at least a pill resembling Niemeyer's, which we use at this hospital. This pill contains belladonna, digitalis and quinine, but not any ipecacuanha. She takes this prescription thrice daily. It is already beginning to control the febrile manifesta-

tions. In addition to this, she is taking inhalations of Lugol's solution (of the strength of five minims to the ℥j of water) by the atomizer. When the Niemeyer's pill brings down the fever, we will put the patient on cod-liver oil, the syrup of the hypophosphites, and arsenic again.— *Virginia Medical Monthly.*

The Destruction of Digestive Ferments in the Alimentary Canal.

Of late years the use of digestive ferments has very considerably increased. It is not uncommon to give patients with weak or disordered digestion extracts containing pepsin or trypsin, in order to aid the conversion of proteids into peptones. But while this increase in the use of extracts containing ferment, by physicians, has been going on, little has been done by physiologists to add to our knowledge of the conditions under which the administration of these ferments may, with confidence, be regarded as profitable or profitless. Some of these conditions are pointed out by Mr. Langley, of Cambridge. He finds that those digestive ferments which are secreted in a neutral or alkaline fluid are rapidly destroyed by acids, and that those which are secreted in an acid medium are rapidly destroyed by alkaline salts. Thus the ferments of saliva and pancreatic juice are destroyed in the stomach; the ferments of the gastric juice are destroyed in the small intestine.

Hence it is very improbable that a pancreatic extract given with food aids digestion to any appreciable extent. The trypsin and other ferments contained in it are rendered ineffective before they reach the duodenum. By some, a pancreatic extract containing zymogen (*i. e.*, a substance capable of giving rise to ferment) is recommended as being preferable to one containing ferment. It is, however, as useless to give pancreatic zymogen as to give pancreatic ferment, since the zymogen is split up in the stomach and the resulting ferment destroyed; and since, further, supposing any zymogen did escape untouched from the stomach, it would remain as zymogen in the alkaline fluids of the small intestine, and so be incapable of aiding digestion by providing the appropriate ferment.

The rapidity with which the sugar-forming ferment of the salivary glands or pancreas is destroyed by the acid of the gastric juice shows that an extract of either of these glands can have very little effect upon starch in the stomach. The effect is indeed confined to a short period at the beginning of gastric digestion. We have reason to believe that for about three-quarters of an hour after a meal there is no free hydrochloric acid in the contents of the stomach. Probably the acid is neutralized by the alkaline constituents of the blood and of the saliva. During this time the conversion of starch into sugar could go on. Since pepsin can not act in a neutral fluid and is destroyed in an alkaline one, pepsin extracts would perhaps be given to most advantage three-quarters of an hour to an hour after a meal, at the time when free hydrochloric acid makes its appearance.—*London Practitioner.*

The Symptomatology of Bright's Disease.

M. Dieulafoy lately called attention to certain symptoms of Bright's disease (parenchymatous and mixed nephritis), of which too little notice has, he thinks, been taken. The most important of them is frequency of micturition, a symptom which, although frequently associated with polyuria, may exist independently of any increase in the quantity of urine. In some cases the symptom is very troublesome; the bladder has to be emptied twelve or fifteen times a night, and twenty or twenty-five times in each twenty-four hours, and this although the total quantity of urine may not amount to a pint. This symptom Dieulafoy proposes to term pollakuria, and it may be manifested in three forms. 1. An early form may attend the commencement of the renal disease, of which it may be indeed the earliest manifestation and of considerable diagnostic significance. 2. A late form, which attends the chronic stage of the disease which has commenced acutely. 3. A form in which the symptom is attended with great pain and distress, and is accompanied by tenesmus and spasm of the sphincter ani, lasting from three to eight minutes. Another symptom is irritation of the skin. M. Dieulafoy asserts that it is met with in one-third of the persons suffering from "albuminous nephritis," whether interstitial, parenchymatous, or mixed, and that

it is especially frequent in women. This symptom is also met with in different forms. Sometimes it has the character of ordinary pruritus, and may be thus the initial symptom of Bright's disease, preceding for months any other inconvenience. It has been explained by uræmia, and has been attributed to an excretion of urea by the skin, but in one of his cases the symptom was not present, although a large amount of urea was excreted by the skin. In other cases the itching is much slighter, and is described as resembling the sensation produced by the contact of a hair with the skin. The last symptom to which attention was directed is that which is described by patients as the "fingers going dead." It is a sensation of formication or cramp, accompanied by such pallor that the part looks altogether exsanguine. It may last half an hour or so, and then disappear entirely. Rarely both hands are affected, and when it is bilateral and partial the area is always symmetrical on the two sides. It appears to be due to a true vaso-motor disturbance.—*Lancet*, July 1, 1882.

Linimentum Crotonis in the Treatment of Acute Bronchitis.

Dr. R. Park, of Glasgow, Scotland, contributes a paper to *Practitioner* in which he calls attention to a line of treatment which he says has been invariably successful in his hands during the last five years:

As soon as the patient comes under treatment, the chest, in whole or in part, is to be rubbed with two or three drachms of lin. crotonis. If the patient is seen at the very earliest stage, when there is only a slight roughness and pain behind the sternum, then it will be enough to have it rubbed into the episternal hollow, along the clavicles, and down the front of the sternum as far as the ensiform cartilage. Otherwise, the whole front of the chest, the sides thereof under the armpits, and the back between the shoulders should be rubbed. The best manner of application is by means of a tag of cotton wool saturated with the liniment and rubbed till it is dried up. Care should be taken, and the patient warned not to let the liniment *run* down the loins and abdomen, which it is apt to do. Also the applying hand should be carefully washed

immediately afterward. The application *at once* relieves the patient, and this relief is maintained and increased by having the surface rubbed covered over with a thin layer of absorbent cotton wool, properly retained to prevent shifting. For this purpose an old chamois leather vest answers well.

From repeated personal experience I know that the liniment applied in this way does not produce pain. Sometimes, after twenty-four hours or so, there is a feeling of tenderness or soreness; but if the cotton wool be not disturbed, and violent rubbing be not resorted to by the patient, this soreness is evanescent, and succeeded by an itching, sometimes very considerable, which remains for three or four days. It may be relieved by smearing the eruption over with fresh butter, lard, or vaseline *under the cotton wool*, care being taken, however, not to disturb the cotton where it has become adherent with discharge.

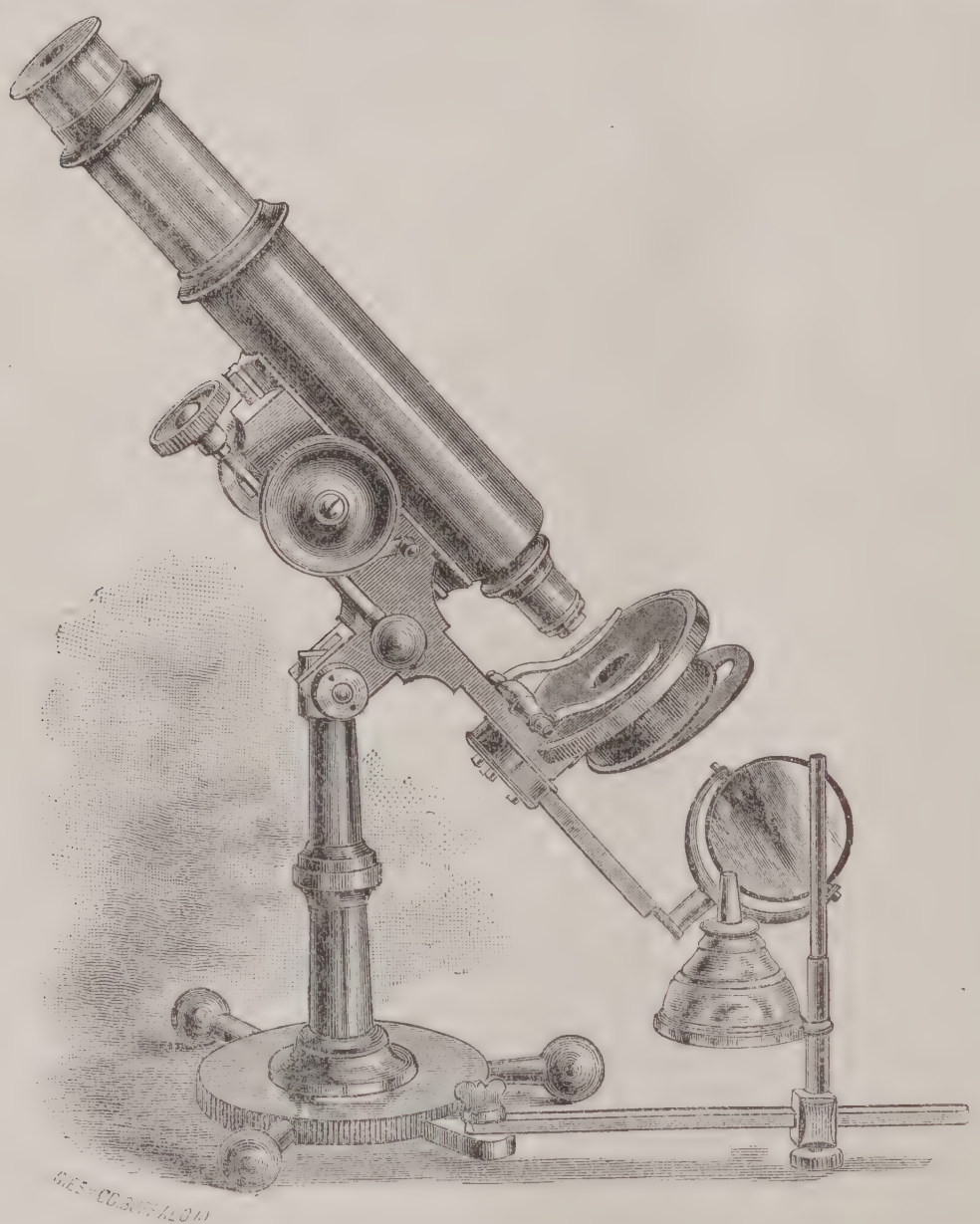
It is this persistence and continuity of effect which makes the application of such signal value, more especially for children and infants. So long as the irritation lasts, so long does the derivative action continue. But it has another great advantage, namely, that it enables the patient to go about his business. There is an impression abroad that it is dangerous for a patient to expose himself out of doors with an eruption such as that of lin. crotonis out upon him. Such an impression is quite erroneous. There is another prejudice against applying it to infants. I can only say that I have had it applied to scores of infants under twelve months, and have never once regretted the practice. On the other hand, I can remember many a time regretting having ordered a poultice under similar circumstances. For the relief of the cough I have prescribed this mixture, which has answered well:

℞. Acidi, hydrobromici, . . . M lxxx
Vini ipecac, ... M c
Tinct. belladonnæ, . . . Mxl
Acidi hydrocyan, dil, . . . Miv
Syr. Scillæ, ... ℥ jss
Glycerini, q. s. ad., . . . ℥ ii
Ft. Mist. Cujus cap. coch. min. j. 2 dis. horis.

Microscopy.

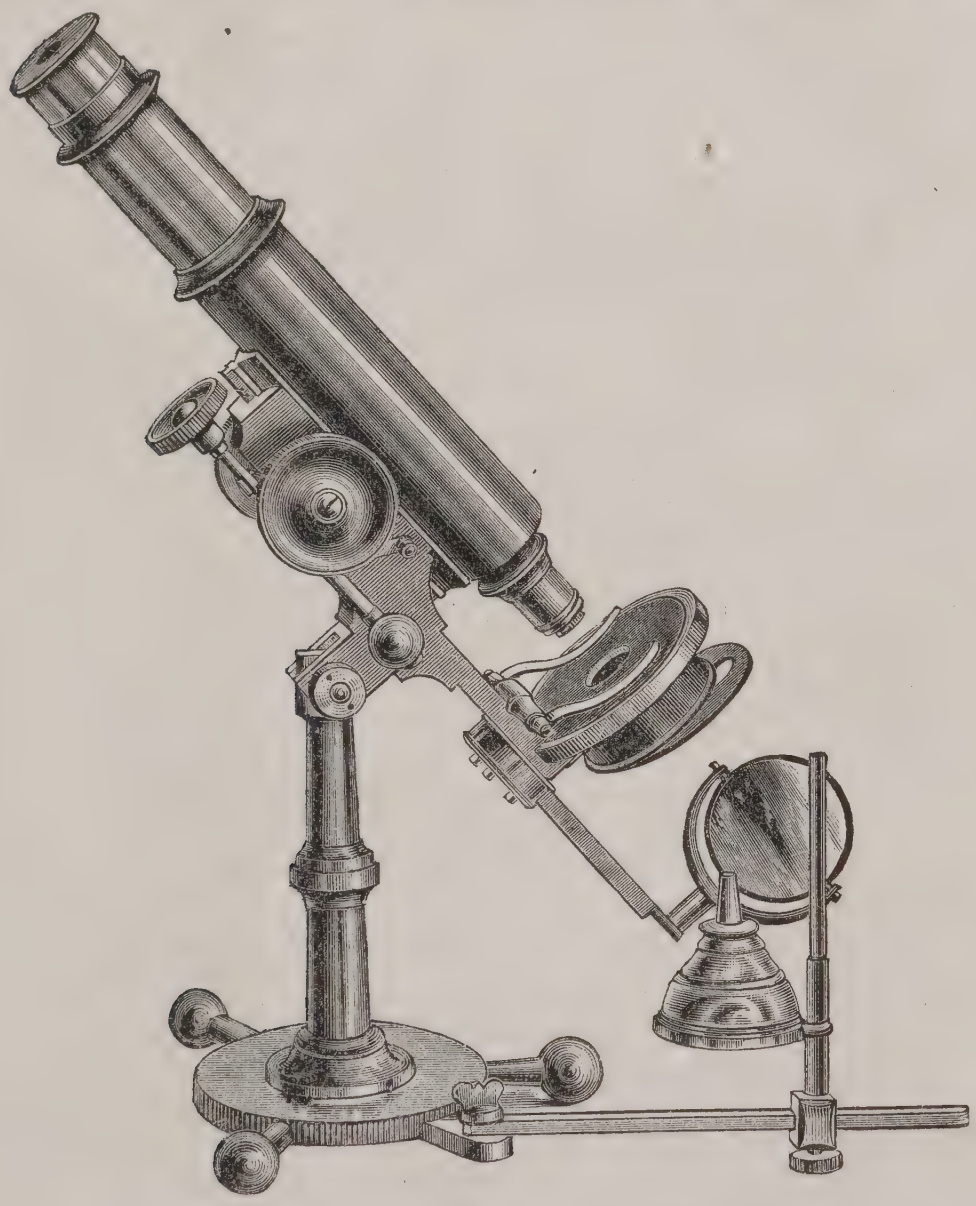
The Improved Griffith Club Microscope.

The Improved Griffith Club Microscope received its name from the Griffith Clubs of Microscopy of Detroit, Michigan, and of Danville, Illinois. The original form was illus-



trated and described in Medical News in 1880, but since that time there have been so many important changes and valuable additions that little of the original remains except the name. It is now a full-sized monocular when

set up, capable of doing the work of the largest stands, and much work never attempted by other microscopes. It is composed entirely of brass, except the face of glass belonging to the stage; and as every part is designed to do some special work, it is made with great care by skilled workmen, and screws or other devices are provided for



tightening every joint that may become loose through use. For the coarse adjustment a rack and pinion, working very smoothly and without lost motion, is provided; and, in connection with this, is a worm-gear which gives a micrometer movement of nearly three inches, clamping the rack when this is in use, making a safeguard for valuable slides. The stage is round, $2\frac{1}{2}$ inches in diameter,

faced with glass, and provided with a sub-stage ring and diaphragm. Above it, the clips are supported by a bar, allowing the use of the entire stage. The mirror bar is adjustable for length, and may be set at any angle above or below the stage, for opaque or transparent illumination with the double mirror. The standard divides midway between the body and the base, allowing the base to be placed on a spindle, always in position in the box, making a first-class turn-table, which is indispensable for the microscopist. An extra standard, with a wood screw, that may be used to fasten it securely to a work-table or other support, is provided to the body of the microscope, when the turn-table base is in use. Two small holes in the foot allow the attachment of an adjustable lamp holder, which is provided with a small lamp for illumination, dispensing with the necessity of rising to look, and making a superior class or laboratory microscope. The instrument is provided with a morocco-covered, velvet-lined case, about $7\frac{1}{2}$ inches long, 6 inches wide, and 3 inches deep, internal measurement; and in ten seconds the microscope may be taken down and packed, ready for transportation, or taken out and set up for use. Eight of the stands may easily be carried in a medium-sized valise, and when taken out and set up they are steadier and more capable of doing excellent work than many of the large and more expensive stands.

Interesting to Microscopists.

At the meeting of the American Association for the advancement of science, held at Montreal, Dr. W. B. Carpenter, the eminent microscopist of London, gave an address. We quote a few of his statements. "Increased angle has given great power of resolution, but what else? Nothing at all. Angle can only be obtained by lessening the working distance. The result is we see nothing but what is in the focal plane. * * * The best lenses have as large an angle as is compatible with requisite focal depth. * * * It has been claimed that low powers of high angle are equal to higher powers; that a $\frac{4}{10}$ with wide angle will do everything. It will resolve tests, but its continued use will injure the eyes. * * * Dr. Dallinger believes if he had worked with a $\frac{1}{8}$ instead

of a $\frac{1}{25}$ he would have injured his eyes. I hear of Americans making one-inch objectives up to great angles, for which the society screw is too small. This makes a very bad $\frac{1}{4}$ and spoils it for a one-inch. * * High power eye-pieces are valuable for testing objectives. * * * The flagellæ of Monas termo would probably not have been found without the wide angle lens, but now that they are known to exist, they have been seen better with a lower angle. A $\frac{1}{2}$ inch of 40° was ordered of Powell & Lealand, who at first were unwilling to make such a low angled glass, but finally did so, and at a public soiree it was exhibited by the side of a $\frac{1}{2}$ inch of 90°, and the difference between them was so striking as to attract universal attention and commendation of the low-angle lens."—*The Microscope.*

GLEANINGS.

AN IRON BOLT REMOVED FROM THE RECTUM.—Dr. W. W. Horton, of Unionville, Conn., recently removed from the rectum of an imbecile and dumb male patient a bolt fully eight inches long, and with a flanged head three-quarters of an inch in diameter. The man was about forty years of age. The bolt had been in the rectum about nine days, and though the patient knew evidently that the piece of iron, which he himself had probably introduced, was the cause of his trouble, he could not make this understood by others. The threaded end of the bolt, which was either in or had passed through the sigmoid flexure, could be felt from without, over the great sacro-sciatic foramen, and had been considered by the man's friends to be a hernia. A truss had been improvised and placed over this.

Dr. Horton, upon being called, explored the rectum and discovered the head of the bolt. Passing an oiled tape over this, he made traction with one hand, while with the inserted fingers of the other he gave a rotary motion to the foreign body, and in this way, after the expenditure of considerable force, succeeded in working it back into the world. The man had been able to evacuate his bowels regularly, and to this undoubtedly is due the fact that no serious symptoms of inflammation supervened. It seems remarkable, from the roughness of the bolt, and the con-

siderable pressure of the pad upon the supposed hernial tumor, that a perforation did not occur.

The Chemical Composition of the Milk of Cows Fed on Distillery Refuse.—Dr. Ellis, at the last meeting of the Canadian Medical Association, read a paper upon this subject. He had made an analysis of the milk of cows fed with different kinds of food. The mean of the solids in the milk of distillery cows was 14.64; of other cows 11.82. The amount of fat in distillery cows' milk was greater than in the milk of others, the minimum of the former being equal to the average of the latter. The casein, sugar, and ash ingredients were much the same in both. The principal difference was the greater amount of fat in the milk of distillery cows. The distillery refuse when examined was found to consist of grain, with the sugar and saccharine matter removed. The fat and albumen remained, together with a small quantity of alcohol, as small as distillers can make it. He could not say whether the use of this food produced any morbid condition in cows.

A New Remedy for Spasms.—The *Medicinische Central-Zeitung*, of July 15, 1882, publishes the result of experiments instituted by Dr. Schiffer, of Berlin, for the purpose of determining the therapeutic value of the *extract of guachamaca*, a tree indigenous on the Apuche Mountains. As a specific for all spastic conditions of the motor apparatus we so far possess, in reality, one remedy only, curare, which, however, on account of its dangers, and the uncertainty of its action, as well as of the remedy itself, has mostly been used for physiological experiments alone.

Guachamaca extract, prepared from the bark of the quebracho plant, which belongs to the same class as the oleander (Nerium ol., L.), and of which latter the skin between tree and bark is also poisonous, is a remedy which, while not so dangerous in its effects, is far more reliable and uniform in its action and can besides easily be procured pure and genuine, and of always equal strength, as it is by no means rare.

Schiffer experimented with this drug, and made his observations in the clinic of Professor Frerichs. He employed the remedy in solution, in the dose of one-sixth of a grain, and by the hypodermic method, in cases of tonic and clonic spasms of the muscular system, and always

with a very good effect. He noted also that, administered internally, no matter in what solution, the drug was as little absorbed by the mucous membrane of the alimentary canal as curare is.—*Philadelphia Reporter.*

Sulphur and Malaria.—At a recent meeting of the Paris Academy, M. d'Abbadie called attention to some facts regarding marsh fever. Some African elephant hunters from plateaus with comparatively cool climate brave the hottest and most deleterious Ethiopian regions with impunity, which they attribute to their habit of daily fumigation of the naked body with sulphur. It is interesting to know whether sulphurous emanations, received involuntarily, have a like effect. From inquiries made by M. Fouque, it appears that in Sicily, while most of the sulphur mines are in high districts and free from malaria, a few are at a low level, where intermittent fever prevails. In the latter districts, while the population of the neighboring villages is attacked by fever in the proportion of ninety per cent., the workmen in the sulphur mines suffer much less, not more than eight or nine per cent. being attacked. Some other facts, tending to show the anti-malarial influence of sulphur, are given.

It will be a great comfort for some to know that though the bottomless pit is feverish, there can be no real malaria.

Domesticity as a Case of Insanity.—Mrs. M——, aged forty-four, mother of eight children, acute mania. The husband, when asked if he could suggest any cause for her illness, exclaimed with much animation that he could not conceive any reason. "She is a most domestic woman; is always doing something for her children, is *always* at work for us all; *never* goes out of the house, even to church on Sunday; never goes gadding about at the neighbors' houses, or talking from one to another; has been one of the best of wives and mothers, and was *always* at home." The superintendent, in commenting on this case, says: "This appreciative husband could hardly have furnished a more graphic delineation of the causes of his wife's insanity, had he understood them never so thoroughly."—*Report of Hartford Retreat for Insane.*

Treatment of Infantile Diarrhœa by Powdered Charcoal.—Dr. Guerin, in referring to a recent communication

to the *Academie de Medicine,* made by Bouchardat, remarks that for a long time he has been in the habit of combating infantile diarrhœa by mixing the milk in the sucking-bottle with charcoal powder. He usually adds half a teaspoonful of the powder to one bottle of milk. The infants take the milk readily, and in a few days the greenish stools of the little patients change to a dark yellow, while their consistence becomes increased. In addition to the admixture of powdered charcoal, the milk is diluted by one-half or one-third of its bulk of sugared water. He has frequently seen intractable summer complaints yield in a few days to this treatment.—*Canada Med. Record.*

Guaiac, for the Cutting Short of Acute Tonsillitis.—Dr. Morell Mackenzie says that guaiac given early will rarely fail to cut short an acute tonsillitis. The formula is as follows:

℞. Resin guaiac, . . . 70 grammes.
Gum tragacanth, . . 43 "
Sacchar. alb., . . . 17 "
Black currant paste, . . q. s.
M. Div. in trochischi No. 350. Sig.: One every two hours.

One can also give aconite, as recommended by Ringer. If the disease is not checked, give small pellets of ice.

The Frequency of Floating Kidney is greater than is supposed, according to Dr. Skorczewski. Among 1,422 persons examined he found 35 subjects (32 females, 3 males). In 5 of these both kidneys were movable.

The causes are, pendulous abdomen, disappearance of circumrenal fat, atony of tissues, subsequent to febrile diseases, and the pressure of some hypertrophied abdominal viscera. In Dr. Skorczewski's cases there was very often observed coexistence of floating kidneys with malarial hypertrophy of the spleen.

Nitric Acid for Chilblains.—Dr. Lapatin who had a large experience with soldiers during the Turco-Russian war, recommends nitric acid as an application in chilblains. Equal parts of dilute nitric acid and aqua menth. pip. are pencilled on the toes, at first daily, then twice a day. After three or four days a brownish scurf is formed, which is thrown off.

ŒSOPHAGOTOMY.—During the last session of the Clinical Society, Mr. Reeves read a paper on the treatment of œsophageal stricture, in which he advocated the operation of making a permanent opening in the œsophagus, in preference to gastrotomy, which has proved so fatal. It may be recollected that, in the second case of gastrotomy, then related by the author of the paper, healthy tube was reached *post-mortem*, without great difficulty; and the impression of this case, coupled with the fact that œsophageal stricture is commoner in the upper part of the tube, induced Mr. Reeves to recommend a cervical exploration before proceeding to gastrotomy. Recently, an opportunity has occurred to carry this plan into effect. A man, aged 63, under the care of Dr. Stephen Mackenzie, at the London Hospital, was referred for operation to Mr. Reeves, who, after consultation with his colleagues, and with the approval of Mr. Adams and Dr. Mackenzie, successfully performed the operation. On reaching the œsophagus, which was recognized with difficulty on account of its walls being cancerous, a large elastic catheter was introduced, and tied in. A further account of the case will appear in due course. Meantime, the operation is of interest, as showing that the suggestions offered by the author of the paper, at the Clinical Society, have been proved to be quite practicable, and tend to bring this rather rare and difficult operation within the range of practical surgery, and possibly to offer advantages over gastrotomy.—*Brit. Med. Journal*, July 15, 1882.

PORRO'S OPERATION.—On Wednesday, July 12, Mr. Knowsley Thornton performed Porro's operation at the Samaritan Hospital. The patient was thirty-eight years of age, had been married twelve years, and in early married life had had a miscarriage; she had been separated from her husband until within the last six months, and shortly after he returned to her she became pregnant. So far as she could tell, she was about at the fourth month, and had not quickened. She had suffered from abdominal tumor for some six or seven years, but it had not troubled her till she became pregnant. It then began to grow very fast, and on admission into the hospital it filled the abdomen, pressing against the ribs above, and pushing the pregnant uterus down into the pelvis, so that a large portion of the fœtus was below the level of the cervix, in the hollow of the sacrum. She was only moderately easy when in bed,

and even then had considerable abdominal pain and occasional difficulty in breathing. She was in a weak and anæmic condition, and able to take but very little food. Mr. Thornton came to the conclusion that pregnancy could not go on; and being doubtful whether the tumor was a dermoid or solid ovarian, or a fibroid outgrowth from the uterus, determined to open the abdomen, perform ovariotomy if it was ovarian, and Porro's operation if it proved to be a sessile fibroid. It was found to have a sessile base, and an elastic ligature was first passed round the neck of the uterus and the pedicles of both ovaries temporarily, and the uterus (with fœtus, both ovaries and the tumor) cut away. No blood was lost, except what was in the tumor, etc. A large mass of adherent omentum was ligatured off, and a Kœberle's wire serre-nœud was then applied on the distal side of the elastic ligature, and the latter was removed. The stump was fixed in the lower angle of the wound, and treated with solid perchloride of iron. The operation was strictly Listerian in every detail. There was little, if any, shock, and the patient is now convalescent. The temperature has only once been up to 100.2°; the pulse on the second night up to 108. The wound has been dressed twice under the spray, and was found dry and sweet. The patient sleeps and eats well, and has (one week from operation) a temperature of 98.4° and pulse 84. The bowels have acted well after enema.—*Med. Times and Gazette.*

Oleates in the Dermatoses.—We read in the *Medical Summary* that Dr. Shoemaker read a paper at the recent meeting of the Pennsylvania State Medical Society, in which he claimed the following advantages of the oleates over ordinary ointments: First, their deep penetration. The oleic acid gives them active ability to penetrate rapidly into the animal economy, and renders any salt with which it is combined more active and effective in dermic medication. Second, their freedom from rancidity. Third, their cleanliness of application. Fourth, their great economy. Fifth, their antiseptic action. Oleate of zinc is of great value in hyperidrosis and osmidrosis and eczema vesiculosum. Oleate of copper is of great value in tinea. Oleate of alumina is of great value in checking mucopurulent discharges. Oleate of iron has a mild astringent action. Oleate of arsenic is of value in lupus and the ulcerating variety of epithelioma, and is better borne than

other forms of arsenic. The surface must be abraded, otherwise there is no result. Oleate of silver is of value as a local application in erysipelas, and when sprinkled over old chronic ulcers sets up a healthier state of the parts. It is of use in carbuncles and boils, and will often arrest pustulation in its earlier stages.

PESSARY IN THE RECTUM.—Dr. H. L. Turney relates (*Nashville Journal of Medicine and Surgery*) the history of a lady patient who had been treated by a homœopath for retroverted uterus. Dr. Turney was summoned to her one night in haste and found the patient in great pain. He examined her and found a large size Hodge pessary skillfully lodged in the rectum.

NIGHT MEDICAL SERVICE OF PARIS.—In this service there occur about five hundred midwifery cases per year. It is proposed to raise the fee for this class of cases from ten to twenty francs.

TRANSLATION.

How and Why One Becomes Tuberculous.

BY M. L. LAUDOUZY, HOSPITAL DE LA CHARITE.

Translated for CINCINNATI MEDICAL NEWS, by D. N. Kinsman, M. D., Prof. of Principles and Practice of Med. in Columbus Med. Col.

(Continued from last number.)

I HASTEN to the second objection, which refers to certain contradictory or doubtful results of experiments. In the first place, *apropos* some fine researches of Mr. Martin, I have told you why certain experimenters have not produced tuberculosis. It is simply because they have not inoculated tubercles, the latter not existing in their pseudo-tuberculous products.

For there are experiments in which they would, by prolonged suppuration and inoculation by non-tuberculous products, obtain tuberculosis. They may interpret this as taking place chiefly from traumatism, fever, and indigestion, which would result in forcing the animals into those conditions which call forth the incubation of tuberculosis. Strong at the time of experiment, the animal be-

comes an invalid, a favorable ground for the incubation of the infectious disease.

If they claim new experiments, yet more conclusive, they have a hundred reasons; but, before God, they can not make a blank table so easily of all that has been done to prove both the virulence and the inoculability of tuberculosis! For upon what disease, if you please, charton excepted, have they made so many experiments, bringing so much of quasi-certainty? For what disease, if you please, has furnished similar contingent of presumptions? Could it be, by chance, for typhoid fever, of which there is to-day no longer any contest as to the epidemic, contagious and infectious character; and, moreover, whence are the experiments so demonstrative that they carry conviction? One does not deny, to-day, the epidemic, contagious and manifestly infectious character of diphtheria; and, moreover, that from divergent demonstrations and from deceptive experiments! Singular contradictions! Whilst they accept as infectious the eruptive fevers, typhoid fever, erysipelas, and many other diseases, which have given less proof than tuberculosis, they could challenge the unanimity of results of the inoculations made as much in France as in foreign nations, from Villemin to Toussaint! For what disease, I repeat it, has approached as near the demonstration?

Gentlemen, we say it here, whilst we are by ourselves, there is a reason that we do not avow, or that a very few have the courage to avow, which makes us fear, in the beginning, the question of the infectiousness of tuberculosis. They fear that demonstration, they fear to be obliged to recognize that tuberculosis is an infectious disease, because the day when this demonstration shall be made they will be obliged to ask themselves, if tuberlosis, like so many of its sister infectious diseases, is not contagious?

Yes, gentlemen, the idea of the contagiousness of a disease is, in general pathology, so often, and with reason, associated with the idea of infectiousness, that many physicians are opposed to the former from fear of being obliged to subscribe to the latter!

Eh! gentlemen, if to-morrow medicine responded in the affirmative to the question of the contagiousness of tuberculosis, it will put no new idea into circulation; it will only have rendered a decree upon a process begun

long ago, and judged with diverse fortunes; a decree rendered by public opinion, before medicine has had necessity to decide as the last resort. Old medicine has been itself the echo of the opinion respecting the appearance of phthisis. Without going back to Galen, you know what Baillou, Cullen, J. Franck, Fernel, and Morgagni believed in regard to contagion; what Andral and Trousseau questioned. A number of physicians today believe without being able, it is true, to furnish the proofs of their opinion; without putting their hospital or private practice in accordance with their convictions. And, moreover, among those physicians who have had a long career; among those who, old in practice, have been able to follow the biography of many generations of patients, there are very few who have not seen, and clearly seen, facts which have imposed upon them a belief in the contagiousness of tuberculosis.

I have heard related by my father one instance of contagion, which appeared demonstrative to him, who knew the particulars of the families.

A young man, rich, tainted by personal antecedents of pulmonary tuberculosis, married a magnificent young lady, indemnified from all antecedent tuberculosis, personal or hereditary. A pregnancy followed some months after marriage, labor easy. Eighteen months after, the young woman died of pulmonary phthisis. Two years after, the marriage of the widower into a family, whose healthy antecedents would seem to be able (so to speak of the husband) to compensate the imperfection which the man brought into the union. Two pregnancies, two labors. After the second labor the woman became sick and succumbed to rapid pulmonary phthisis. As for the husband, he died later of phthisis with a chronic course.

My preceptor, Prof. Hardy, has seen similar instances, and you will find analogous cases reported in the remarkable thesis which Musgrave-Clay read last year upon this subject.

Few facts, among those which ought to arouse attention, will appear to you so clear as the following, observed a few years ago in England, by Weber.

A man, son of a phthisical mother, with two brothers and one sister dead from phthisis, in his youth was afflicted by many diseases of the chest, and spat blood at twenty and twenty-one years. He became sailor at twenty-five.

His health was restored, and married at twenty-seven years. He marries four times, contaminates successively his four wives, who die phthisics. He does not dare to marry a fifth time, "from fear," it is the phthisical widower who speaks, "of assigning his wife to certain death." He dies a consumptive himself. His autopsy reveals, in the two lungs, at the side, some ancient scars, some recent tuberculous lesions.

I know, gentlemen, all the objections made to the interpretation of like observations in relation to contagiousness. They object that the fatigues of maternity, vexations, anxieties, regrets, material difficulties, vigils which carry the disease of one of the partners with it, creating from all circumstances the condition of decay, of morbid opportunity, which of themselves would be able to bring tuberculosis upon the other partner, without it being necessary that the latter should be found seated at the bedside.

But, gentlemen, it is not only the phthisic who dies after long months of sleeplessness, of fatigue, of vexations, of anxieties, of material difficulties for its partner. How many diseases of the heart, how many diseases of the nervous system, coming during the weeks and months of confusion in the affairs and desolation in the family, create for the wife that physiological misery which could very well bring tuberculosis; which brings it exceptionally, whilst the physiological misery of the race, favoring tuberculosis, makes it so common.

Why do they not object to these facts that, if phthisis was contagious, "they could no longer debate, the conviction would be imposed upon them with living force, because tuberculosis would be the most infectious of all contagious diseases;" for these facts prove really, although contagious, tuberculosis would justly be the one of all infectious diseases which should not occupy the summit of the scale in infectiousness.

It is in that sense that Prof. Bouchard has been able to say that, if phthisis was a disease which frequently attacked man, it was not (as is syphilis) a disease of man.

Finally, the objection of the non-contagionists—that the facts do not carry full conviction—could be offered, for the same cause and for the same reasons, to many of the infectious diseases, which levy a much lighter tribute upon humanity.

There is among us a small number, it is true, who escape measles and typhoid fever; there are others who escape scarlet fever; more yet who escape diphtheria and erysipelas; and yet these are infectious and contagious diseases. That proves simply that, although infectious as these diseases may be, they carry with them their degree of contagiousness from the beginning, and as a result, we have not realized, in the time mentioned, the conditions of predisposition, without which the infectiousness of a disease remains a dead letter. That proves simply, that, although it may be infectious, tuberculosis is not different from the common infectious diseases; that proves that there is less predisposition for our organisms in the presence of tuberculosis than in the presence of eruptive fevers, for example.

Perhaps we are not yet in position to prove the contagiousness of tuberculosis; but, practically, we have the stern duty, as Prof. Jaccond recommends, of conducting ourselves as if it had been demonstrated; and that the more, because frequently families will employ the prophylactic measures, which you will know how to institute with tact, without revealing the theoretical opinions which will have dictated your conduct.

Especially, gentlemen, we do not fear the vulgarization of the idea of contagiousness of tuberculosis. Let us not say, with one professor in phthisiology, that, if phthisis was contagious, it would be necessary to limit ourselves from speaking of it, so great would be the fear that the unfortunate phthisics would be deprived of the care of their near relatives!

Does diphtheria, does small-pox, whose contagion is no longer in doubt, cause parents to fear? And then, if we had in possession some demonstration of the contagiousness of phthisis, would it be to the world a sufficient reason for us to keep silence? Whilst they discuss, whether yes or no, they must speak or keep silence. Who knows if this is not in favor of the contagion, that the tide of tuberculosis mounts every day, that in the army there are more die from tuberculosis than in private life? And yet the army, you know, is made up of the best of the population; and, moreover, they have taken care to eliminate from the lists all who on any side approach physiological misery. Would it not then seem that crowding creates

and augments the chances of infection—collects the grain, to which is due the mortality by tuberculosis?

You know the *role* crowding enjoys in the army, in the epidemic of measles, of mumps. Could it not enjoy an analogous *role* in the frightful production of military tuberculosis?

All of us who, under different titles, have passed through the army, know, in respect to promiscuity, in respect to contagion, what a barracks, what a crowded dormitory is. Eh, well! is it repugnant to our mind to have fear of a coughing bed-fellow? Ought that cougher to be removed in a few days? to be removed from the barracks and sent to a hospital? One could listen to such considerations, and find perhaps it is not astonishing that tuberculosis should be the plague of the army, since in 1872 it took 452 men out of 1,000 in France, 782 out of 1,000 in England; and that it cost France 3,600 upon a contendent of 280,000 men! Let me ask those who fear to allow contagion as a factor in this frightful mortality, is it not singular that England, in spite of the rigor of the winter of 1854 and '55, should have lost less from consumption before Sebastopol than in the barracks of the First Royal?

Does not this explain this observation of military surgeons, that, contrary to other plagues of the army, tuberculosis never haunts a campaigning army.

With this glimpse of the possibility of contagion, can we not see the reason for the remark of Prof. Colin, of Val-de-Grace, that acute tuberculosis attacks by series the soldiers who enter the hospital as affected by an epidemic disease? Can we not understand how certain corps of the Paris garrison, always, and for a long time, confined to the same barracks, pay a singularly predominant tribute to tuberculosis?

Do we not understand that the mortality from phthisis in certain corps in Paris augments in ratio as the length of their enlistment—shall we say length of residence in the barracks? Can we not see that acute tuberculosis attacks recruits on their arrival at the corps, as if the seed, without ceasing, brought together and stirred about, had only to fall upon a ground, so much the more fertile as it is younger and better prepared by physiological misery, to which home sickness, insufficient food, confinement and fatigue of a new mode of life, alternating with an exhausting activity, are roads? These are all occasional

causes, which change the firm and vivacious conscript of yesterday, the invalid of to-day, thoroughly prepared to take from his room-mate the tuberculous germ, as he would have taken the germ of measles or mumps.

That which occurs at the barracks takes place more frequently at the hospital than we care to confess. Should we not be more astonished at the number of coincidences, so well known by all of us who faithfully attend the meetings of the Anatomical Society—the coincidence of finding so frequently tubercular granulations in the lungs of the patients who have perished slowly from organic affections, after a long sojourn in the hospital?

Wherefore, from this so frequent coincidence, instead of seeing an antagonism, has been pretended by some between cancer and tuberculosis, one may say that the phthisical from organic affections (this seems especially true of gastric epithelioma) present at the hospital a singular frequency of tuberculous complications, upon which Prof. Peter never failed to insist? It would be very interesting if that coincidence had been controlled in public practice, and if we could exactly know what would happen to a cancerous patient, whether he dies either in the city or in a hospital, where tuberculosis is never absent.

I can not insist too much on that question; but I could wish, in the matter of tuberculosis, whose appearance we observe in the course of an antecedent affection, we had the same manner of proceeding as in the matter of all other diseases coming to engraft themselves all at once upon an anterior morbid state. Where we have, after long months in our wards, a tabetic in his last stages, taken with pulmonary tuberculosis, do we ever ask ourselves how and why it ended in tuberculosis? Do we ask if anything in the inherent conditions of that tabetic, or any one of his surroundings, has been able to produce or favor the genesis of intercurrent affections? It is in proceeding, otherwise it is in making a minute inquiry, *apropos* to each of your patients, that, gentlemen, you will perhaps become contagionists, as I became long since, thanks to the instruction of my preceptor, Prof. Villemin. I was able to follow, in that regard, in 1879, in this same service of the *Charity*, at No. 17 of St. Charles Ward, a patient whose history has vividly impressed me. It relates to a man of fifty-one years, entering at the begin-

ning of the year, with M. Hardy, for an organic affection of the stomach. That man was free from all other affections, his hereditary antecedents were good, his personal history was excellent; the only thing that one could notice was a little alcoholism. All, I repeat it to you, was a gastric epithelioma of small size. This patient was examined many times, and studied thoroughly in detail in M. Hardy's clinic. The epithelioma, encroaching to a small extent upon the anterior face and the great curvature of the stomach, gave rise to rare vomiting. Suffering everything, dyspeptic and emaciated as the man was, he was not cachectic, and was perishing very slowly, when he presented, at the end of May, five months after entering the hospital, signs of pulmonary tuberculosis with a rapid march, which carried him off in a few weeks. I add that this patient (other symptoms not appearing to me essential) was flanked by two phthisics. On his left, in No. 16, lay, for many months, an alcoholized cartman, attacked by fibrous tuberculosis of the left summit; on his right, in No. 18, lay a young scrofulous patient, who, after a sojourn of seven weeks in the hospital, succumbed to phthisis, worn away by a tuberculosis, principally pulmonary, with a sub-acute course. In this patient we found both summits involved, by a cavern as large as a pigeon's egg. As to the lungs of our man with the gastric epithelioma, they were stuffed in their upper lobes with miliary tubercles.

I would not draw from that observation, nor from the coincidence so common of cancer and of tuberculosis in the hospitals, more arguments than it will allow; but I must call your attention to these facts, too often left in the shade. I shall demand only what you would have thought and said, if our epitheliomatous patient had been carried off by measles, or erysipelas, in place of rapid tuberculosis? You would have sought in the contagion of these two exanthemes a determining cause of a disease whose decline from cancer would have been the occasional cause. I avow that I have thought concerning tuberculosis as you would have said of measles. I have seen in tuberculosis a disease which "came in to finish another," that reasonably I have held this for a long time, *apropos* tabetic and gastric patients, etc., neophthisical whom I have thought took on the condition of tuberculous contamination at the hospital!

Do you comprehend now, gentlemen, why I maintain

that, far from shunning the study of contagion, the physician ought expressly to occupy himself concerning that question, about which to keep silence is worse than a fault? We ought to seek the truth, and if we present it we ought not to cry it from the housetops; but by inspiring our conduct and conforming our practice, make the patients who surround us prosper, make it enter into the counsel of those who, under divers titles, have charge of public health. Think, gentlemen, that tuberculosis, at the commencement of this century, caused one-tenth, that now it causes one-fifth of the general mortality of France.

Book Notices.

A System of Surgery; Pathological, Diagnostic, Therapeutic and Operative. By Samuel D. Gross, M. D., LL. D., D. C. L. Oxon., LL. D. Cantab., Emeritus Professor of Surgery in the Jefferson Medical College. Illustrated by upward of 1,600 engravings. Sixth edition, thoroughly revised and greatly improved. In two volumes. Large 8vo. Pages 1,194 and 1,174. Philadelphia: Henry C. Lea's Son & Co. Cincinnati: R. Clarke & Co.

This great work, by Prof. Gross, is undoubtedly the most magnificent work upon surgery in the English language. So far from being a mere compilation, like very many works, it embodies the fruits of the labor of one possessing superior intellectual powers, strengthened and cultured by learning, and who has had more than half a century's experience in private and public practice, that has brought to his attention the very many thousand patients possible to be brought under the notice of one in that great length of time. Add to this the results of the diligent and extensive research of many years of the experience of all the great surgeons, as set forth in contemporaneous literature, comparing the observations of one with those of another, and making such deductions as would follow. It is a treatise upon surgery that is really encyclopedic in its character, as regards fully treating every topic of the science, and minutely detailing all that is known in regard to it.

Prof. Gross expresses pleasure at the great strides surgery has made in the last fifteen years. Much of this

progress is unquestionably due, he says, to the foundation which Dr. Ephraim McDowell unconsciously laid, when in December, 1809, he performed his first operation for the removal of a diseased ovary. To that operation Prof. Gross proceeds to state, in the bold hands of the two Atlees, Clay, Wells, Kimball, Dunlap, Keith, Pean, Schroeder, Koeberle, Thomas, and others, are directly due the brilliant advances which have been made in abdominal and pelvic surgery during his time. Prof. Gross then mentions Lister and others, who, by their discoveries of new methods of operating, have contributed greatly to the advancement of surgery; but while we would join him in bestowing the meed of praise on every one to whom it is due, we consider that he himself is second to but few in his contributions to the progress of surgery. There is scarcely a department to which he has not either added something, or elucidated better that which was already known. Without stopping to record actual discoveries, we can truly say that his learning, experience, and research, more than that of almost any other great surgeon, has elevated surgery to the high pinnacle which it has attained.

In the sixth edition of this great work, every chapter has been thoroughly revised, many portions have been entirely rewritten, and a large amount of new matter has been introduced, in order to place the work fully abreast of the existing state of our knowledge. We presume, on account of the great age of the author, that it is not probable it will ever be revised again by him; but so near perfection does it seem that surgery has attained, as evidenced by the expressions of such surgeons as ——— ———, it will be no little while before one will be needed. Mechanical surgery certainly can not have much added to it in the way of improvement, and the microscope, with its almost perfected lenses, has been so diligently employed in the last decade in investigations, that it would seem there was nothing more to be discovered in pathology. But it is not safe for any one to attempt to limit the possible.

THE PRINCIPLES AND PRACTICE OF SURGERY. By John Arkhurst, Jr., M. D., Professor of Clinical Surgery in the University of Pennsylvania, etc. Third edition, enlarged and thoroughly revised, with 555 illustrations.

8vo. Pages 1,064. Philadelphia: Henry C. Lea's Son & Co. Cincinnati: R. Clarke & Co.

This work has had its merits proven by a demand for a third edition. Not half so large as the great work of Prof. Gross, it is as full as its purposes require. It treats, in a very thorough and satisfactory manner, all the subjects in the various departments of surgery. The medical student and general practitioner of medicine will find it admirably adapted to their wants—the former as a text-book, the latter as a most valuable work of reference, when he wishes to refresh his mind and obtain the latest information on any subject of surgery. While there are no omissions or abridgments of any descriptions or discussions essential for imparting a thorough knowledge of any principle or practice, yet unnecessary details and lengthy statements of views of various writers, although they may be interesting to the specialist, are excluded. The student and general practitioner want *facts*, and, as much as possible, *facts only*, and every word written beyond what is necessary to impart a full and satisfactory knowledge of them only taxes the time and obscures the elucidation of them.

In revising his work for a third edition the author has spared no pains to render it worthy of a continuance of the favor with which it has heretofore been received. We predict an increasing demand for the work.

THE PHARMACOPŒIA OF THE UNITED STATES OF AMERICA. Sixth Decennial Revision. By authority of the National Convention of Revising the Pharmacopœia, held at Washington, A. D., 1880. 8vo. Pages 488. New York: Wm. Wood & Co.

In accordance with the call of Dr. James M. Morgan, the Assistant Secretary and last surviving officer of the Convention of 1870, the Convention for the Sixth Decennial Revision of the Pharmacopœia of the United States of America met in the National Medical College, in Washington, D. C., on May 5, 1880, at 12 M.

After spending two or three days in discussion in regard to the plan of the new pharmacopœia, the improvements that were necessary to be introduced, etc., the Convention appointed a Committee of twenty-five members, entitled, a "Committee of Revision and Publication of the Pharmacopœia of the United States of America,"

to revise the pharmacopœia and publish it. This Committee of Revision held two meetings in Washington before separating. In September, 1880, they met again. At other times, both previously and subsequently, interchanges of opinions were accomplished by circulars. The work before us, which is just published, is the result of their labors, forming the Pharmacopœia of 1880, and which will be officinal until 1890.

The new pharmacopœia, in so far as modifications have been made, will make necessary a revision of all the Dispensatories. Physicians and druggists, however, who have recently purchased costly Dispensatories, need only to purchase the new pharmacopœia to be posted as to changes.

We have space to mention only a few changes. Seventy-eight crude drugs have been dismissed from the officinal ones; twenty-eight inorganic drugs or chemicals; one hundred and six pharmaceutical preparations; and seventeen miscellaneous substances. There have been introduced thirty crude drugs; sixty inorganic drugs or chemicals; one hundred and fifty pharmaceutical preparations, and sixteen miscellaneous substances. A new base for ointments has been introduced, derived from petroleum, entitled, Petrolatum, with a minimum and maximum melting point.

The Latin names of alkaloids have been made to terminate in *ina,* and the corresponding English names in *ine;* the latter termination being at present preferred, in modern chemical language, to the termination, *ia.* The so-called neutral principles have received the termination, *inum;* English, *in.* Examples (*Alkaloids*): morphina, morphine; quinina, quinine. (*Neutral Principles*): picrotoxinum, picrotoxin; santoninum, santonin.

The gender of the Latin nouns of salts, in *as* and *is,* has been changed back to the masculine, it previously having been feminine. We also notice the following changes: *chirata, asafœtida, cambogia,* for chiretta, assafœtida, gambogia; *lupulinum,* for lupulina; *glycerinum,* for glycerina; *pyroxylinum,* for pyroxylon; *manganum, bromum, chlorum,* and *iodum,* for manganesium, brominium, chlorinium, and iodinium, etc.

It is our opinion that some of the changes in nomenclature will not be adopted by the profession, and that the old names will be restored in 1890. We regret that

the Committee did not abandon the use of diphthongs in the orthography of medicines; for instance, spell *asafœtida*, asafetida. Diphthongs are being abandoned by writers generally, and especially medical writers.

SLIGHT AILMENTS: THEIR NATURE AND TREATMENT. By Lionel S. Beale, M. B., F. R. S. Second edition, enlarged and illustrated. 8vo. Pages, 283. Philadelphia: P. Blakiston, Son & Co. Cincinnati: R. Clarke & Co. Price, cloth, $1.25; paper, 75 cents.

The fact that Prof. Lionel S. Beale is the author of a work is a sufficient guarantee that it is of value. It would not be considered possible that one of great learning as he is, and profound investigator, and who is the author of numerous works of acknowledged high order, could be the author of a work of inferior merit. An examination of the present work shows that it is one containing a large amount of valuable information—information of practical importance. Although the ailments of which it treats are denominated slight, yet they assume no little importance when they come to be treated. The knowledge that is available in regard to not a few of them is meager, and the practitioner, consequently, oftentimes, has no little trouble in managing them—far more frequently than happens with grave affections. What physician is there who has not met with cases of neuralgia and rheumatism that he would not rather treat than a score of cases of pneumonia, or half a dozen cases of typhoid fever, than one of them?

Among the number of "slight ailments treated are constipation, diarrhea, intestinal worms, vertigo, giddiness, biliousness, sick headache, neuralgia, rheumatism, the feverish and inflammatory state, actual changes in fever and inflammation, common forms of slight inflammation.

We have no doubt but that the work will meet with a large sale.

MEDICAL ELECTRICITY. A Practical Treatise on the Applications of Electricity to Medicine and Surgery. By Roberts Bartholow, A. M., M. D., LL. D., Professor in Jefferson Medical College. Second edition, enlarged and improved. 8vo. Pages, 291. Philadelphia: Henry C. Lea's Son & Co. Cincinnati: R. Clarke & Co.

The first edition of this work having been exhausted in less than a year, shows the great value in which it has been held by the profession. Only a work of unusually great merit could have met with such a rapid sale. The subject treated is not one to which writers have not given attention; and, therefore, there being no other works upon it, this one would be sought for in consequence of there being no other one that could be consulted. On the contrary, there are quite a number of treatises on medical electricity, some of them quite large and exhaustive, by eminent gentlemen of the profession, who have given it special attention. The intrinsic worth of the work alone has created the great demand for it which has been manifested. It has been found to fill a want, notwithstanding having numerous competitors. It was the purpose of the author to prepare a work from the practitioner's, rather than the merely scientific standpoint; and this he has certainly accomplished.

In the second edition the same conception has been maintained which was paramount in the first; and at the same time there is developed more fully the modern methods of ascertaining and expressing current strength, tension, resistance, etc. Beside an increase in the number of lines to the page, and the condensation of the matter, new and old, the work has been enlarged by the addition of thirty pages.

A Practical Laboratory Course in Medical Chemistry. By John C. Draper, M.D., LL.D. Pages, 71. New York: William Wood & Co. Cincinnati: R. Clarke & Co.

This is a small work on the subject mentioned upon the title page, of the style of small singing works—the pages less in height than width, and opening in direction of its length. It has as many leaves as pages, as the leaves are printed only on one side.

It gives brief directions for the detection of poisons, organic and inorganic; also for analyzing the various animal fluids, as wines, milk, etc.; also for the examination of sediments and calculi.

Students and physicians will find it a highly convenient little work.

EDITORIAL.

THE DISTINGUISHED PHYSIOLOGIST, DR. W. B. CARPENTER, AS A PREACHER.—Every physician and medical student in this country knows of the very eminent English physiologist, Dr. Wm. B. Carpenter. His works on human physiologly, and comparative physiology, and on microscopy, have been text-books in medical colleges of the United States for thirty years or longer. As an observer and thinker, no one has a higher standing in the profession in the world than he. At the present time he is visiting this country, and we hope to have the pleasure of meeting him. We feel sure that there is no physician on this side of the Atlantic who would not rather see Dr. Carpenter than any one of the high-born of Europe.

Although we knew that Dr. Carpenter was a man of versatile talent, yet we were not aware that he ever acted the preacher, but it seems that such is the fact. From a recent newspaper, we learn that, on a Sunday, he occupied the pulpit of a Unitarian Church in Providence and preached from the two texts: "Prove all things; hold fast that which is good;" and the injunction of Paul to Timothy to avoid vain babblings and opposition of science so-called. He then described law as evidence in the regularity of natural phenomena, so far as he understood them, and next described the force or energy which kept everything in accurate motion. But whence this energy? He did not regard it as sufficient to reply like some, "The laws of nature," for these laws are simply generalizations of facts and have no coercive effect. We go back from force to force and have still to ask, whence the final force? He added:

"We have, in our own consciousness of personal energy, the fundamental idea of force, and I believe that it is in this fundamental idea of personal energy that our own conceptions of causation are based; and I think that the best scientific thought of all schools is coming nearer and nearer to that rule. The great doctrine of evolution we see is merely the expression of the mode of operation of one continuous energy. There must have been a beginning to that evolution. The very name implies a beginning. Accepting, as I do, the history of evolution of the organic as well as of the physical forces, it comes to this

that there is a continuous energy that sustains and regulates the whole. The whole doctrine is simply the expression of a uniformity of cause.

"We can get no higher than that, and there theology comes in. Theology takes up this universal force and energy, and develops it in connection with these thoughts and feelings of our own higher nature, which lead us not only to the conception of a first great cause, but of one that is in sympathy with the wants and the yearnings of the human spirit, and places itself in direct relations with us. The highest conception we can take of the doctrine of evolution, is simply the tribute we pay to the grandeur, the wisdom and the power that planned out that evolution without a check and without a break."

Dr. Carpenter then led the congregation in the Lord's prayer, and gave out the hymn beginning:

Lord of all being, throned afar,
Thy glory flames from sun to star;
Center and soul of every sphere,
Yet to each loving heart how dear.

The services were thus brought to a close.

D. Carpenter is a son of the late Lamb Carpenter, D. D., eminent in the ranks of English Unitarianism half a century ago. He is also a brother of the late Mary Carpenter, the female apostle of prison reforms, and the friend of the sick and suffering everywhere. He comes of a good stock, and his Providence effort shows that acquaintance with the laws of nature does not involve a repudiation of all beliefs that are not explainable by terrestrial phenomena. Considering his religious connection, it is somewhat surprising to us he is not a homeopathist, for we can not call to our mind a Unitarian who is not a homeopathist. Roman Catholics, however, Presbyterians, Orthodox Jews, Hardshell Baptists, Oldschool Methodists, Orthodox Congregationalists, are nearly always of the Old School in Medicine, or *Regulars.*

The New York Controversy.—The contest in New York for and against the recognition of homeopathic practitioners of medicine seems to continue unabated. Not a few of the most eminent physicians of the city of New York, and of the State, urge the breaking down of all obstacles in the way of consulting with homeopathists. They profess to be as much opposed as any one to the recognition of all quackery, and especially quack doctors;

but claim that a legally constituted physician, who has been regularly educated, is a cultured gentleman, a man of learning and scientific attainments, is not a quack, even though he style himself a *homeopathist;* but that he is a quack, though he style himself a *regular physician*, who is ignorant, has no learning or culture, is boorish in his manners, and unprincipled in his conduct toward other practitioners. Some lengthy and quite plausible articles by these gentlemen have appeared in the pages of the *Medical Record.*

Undoubtedly there has been a tendency on both sides to obliterate all dividing lines. A couple of years ago a certain homeopathic society passed resolutions denying that "similia similibus curantur" was a cardinal doctrine to be observed by them, and to govern in all cases in the treatment of disease, while *regular physicians* have for some time indignantly cast off the name of allopathists, and claim to observe in practice no set rules or dogmas, but to treat diseases rationally, submitting everything to the test of experience. With no prejudices against small doses, even willing to tolerate infinitesimal ones, if experience should prove that benefit would result in any case from them, the objection to homeopathists at present consists in the profession of possessing a system of curing peculiar to themselves, when the fact is there is not anything in homeopathy that a regular physician could not make use of, if he thought it possessed any merit and was worth adopting. As Dr. Cathell says in his little work, "homeopathy would have been absorbed into rational scientific medicine before we were born *if* there had been anything in it worthy of absorption."

But, beyond a doubt, there are not a few physicians who have gotten into the homeopathic fraternity, and seem to be kept there by force of circumstances, who are as *regular* in their treatment of diseases as any regular physician. Some of these are probably dishonest men, who hold on to the name of homeopathist in order to make money; but there are others of them whom we can not look on in that light. Having graduated, perhaps, in a homeopathic school, and the name homeopathist attached to them in consequence, they seem compelled to wear it, although they do not believe in homeopathic dogmas nor practice them, nor give out to the world that they do. They quietly practice the profession of medicine to the best of

their ability, impressing every one as being courteous, educated gentlemen, and contrasting most favorably with many coarse, boasting, tricky, ignorant doctors who call themselves *regular* physicians. We have in our mind a gentleman of this city, who is considered a homeopathic physician, although he has no sign on his house announcing him as such, nor is classed among homeopathists in the Directory of Physicians, Druggists, and Dentists, and who has a very large and lucrative practice—numbering among his patrons many of the wealthiest and most influential families of the city. While he seems to attend sedulously to his own business, we have heard from those who have had opportunities of knowing, that, in the way of obtaining full information in regard to the diseases of his patients, in order to treat them intelligently, he has more specimens of morbid secretions and excretions sent to such expert chemists and microscopists as Prof. Wayne for analysis, than a score or more of other physicians do. To what extent his large practice is due to this care in investigating the diseases of his patients, in order to better treat them, we will not venture to say. It is but reasonable to presume, that, having obtained a thorough knowledge of a case, and then treated it in a *rational* manner, the result would be better than if the treatment had been founded upon an imperfect acquaintance of the case; and his reputation added to in consequence.

Our acquaintance with homeopathic physicians is very limited. With the dogmas of the school we have no sympathy; yet we do not believe that all the quacks are homeopathists. It is a melancholy fact that there is a large number of men who call themselves regular physicians, having diplomas, and are members of medical societies, who are coarse, ignorant, and unprincipled, and will stoop to any meanness to steal a patient from an honorable physician. To fraternize with such is repugnant to every feeling. The unfavorable contrast that such make with many called homeopathists, but who are not tied to infinitesimal doses, and do not hesitate to openly reject the dogma of "similia similibus curantur," has no doubt had much influence upon a number of eminent New York physicians, in desiring to break down all barriers of recognition of all legally qualified medical practitioners. It has probably occurred to them that if one physician is to be denounced as a quack because it is supposed he

holds to particular dogmas, why should not also an ignorant pretender, who is as deficient in morals as he is in knowledge? Dishonesty ought to be as much an offense in one class of dishonest acts as in another.

At the present, the gentlemen of the New York State Medical Society, in favor of recognizing homeopathists, are in the minority. We believe, however, that the agitation of the question will be productive of good, tending to elevate the standard of the profession, and spreading more correct notions of what constitutes a really regular physician—that it is not all in the name as some seem to suppose.

Clinical Thermometers.—Dr. Edward R. Squibb published in the second number of *Ephemeris*, an excellent article on Clinical Thermometers, which has hardly attracted the notice which it deserves. The clinical thermometer has always been supposed to be an instrument of precision, but that this is not so, probably more than one medical man has found to his sorrow, when he has relied upon it in making his diagnosis. No doubt many can remember the time when they have been frightened at the high temperature registered, and have either ceased to put reliance in thermometric diagnosis, or have tested their thermometer and found it one, two, or even three degrees out of the way. A good instrument is very valuable, but, as Dr. Squibb says, a poor one is an abomination and a fraud. It is certainly odd that after so many years that they have been in daily use, that, as a rule, physicians have hardly suspected that a thermometer (at least a good looking one) could testify falsely.

Dr. Squibb tells us how to select a trustworthy instrument, and this without regard to its appearance or price, both of which are so deceptive. Errors may arise from imperfect tubes or from careless construction, but the most important source of error lies in the fact that for three years the glass continues to contract, so that the most carefully made thermometer may soon become useless, unless it has been properly "seasoned" before being graduated. This contraction of the glass continues for about six years, but the error for the last three is so small that it may be neglected. An old instrument, the error of which is known, is of great value, as it may be used to determine the errors in others.

On the thickness of the glass will depend the sensitiveness of the thermometer. If the glass is too thick, then it will register too slowly, and time will be lost; if too thin, it will be easily broken. Therefore, test your thermometer, and by experiment determine the shortest time that is required for it to attain its highest reading. This ought to be reached, on the average, in from six to eight minutes. See that the register does not shake down too easily, for many a thermometer has been destroyed by the rough shaking of an easily moving register.

Get an instrument which can be read easily. Finally, slowly and carefully heat the thermometer in warm water until the column of mercury is within one or two degrees of the top. If, on cooling, the mercury is pushed down, there is too much air in the tube, and the instrument must be discarded.

Do not buy a thermometer unless with it there be a certificate from either the Yale or Kew Observatory stating the variations from the normal standard. The older the certificate the better. Even after every precaution, it is better to verify the correctness of the thermometer in daily use every few months.—*San Francisco Western Lancet.*

The New Pharmacopœia.—It will be seen by referring to the department of "*Book Notices*" that the new pharmacopœia has just been issued. It is of larger size than the previous one, and an examination of it shows that a number of changes have been made in various respects—a few of them, it will be observed, we have noticed in noticing the book. In *nomenclature* there are some modifications; as, for instance, the Latin names of alkaloids are made to terminate in *ina*, so that morphia hereafter should be written *morphina*. It will thus more nearly correspond with the English name, morphine. Also *quinina* should be written instead of quinia. Aqua chlorinii is changed to *aqua chlori;* arsenici iodidum to *arsenii iodidum;* pilulæ hydrargyri to *massa hydrargyri;* manganesium to *manganum;* and many others.

The most important changes are the changes in the strength of preparations. There are about seventy-five of these noted on pages 454 and 455. We have space to mention only a very few. We will premise by stating that the comparison of strengths between the pharmacopœias of

1870 and 1880 is made by the number of parts of active constituent in 100 parts by weight of the preparation. In 1870, the following preparations had the following number of parts of active principle: Tr. aconite, 47.6; tr. opium, 9; tr. valerian, 15; tr. asafetida, 16; tr. cinchona, 25; tr. cannabis, 36. In 1880, these same preparations are directed to be with parts as follows: Tr. aconite, 40; tr. opium, 10; tr. valerian, 20; tr. asafetida, 20; tr. cinchona, 20; tr. cannabis, 20.

We do not know why these changes were made unless it was to compel physicians and druggists to buy the book. Changing the formula of such a preparation as tr. opium, we regard as a very serious matter, especially if made stronger, and should not be ventured upon except for most urgent reasons.

The Calamity in the Seguin Family.—On a recent morning the public were startled with the dreadful announcement that the lovely wife of Dr. E. C. Seguin, of New York, had, in a fit of temporary insanity, shot all of her little children—three in number—and afterwards herself. She had taken them to an upper room, tied their hands behind their backs, and then, under the pretext of playing "blind man's buff," first killed the eldest, a beautiful boy of six years, then two sweet little girls, aged respectively five and four years, and evidently in an instant afterward took her own life. When found in the evening, some time after the commission of the deed, all were dead. The lady was of a most lovable disposition, had been devoted to her husband and family, and had shown no symptoms of insanity except occasional attacks of melancholia, for which she could not account, and which she bravely endeavored to overcome. Her devoted husband, with an affectionate concern for her condition, had arranged to have her accompany him on a pleasure trip the next day; but he came home in the evening to find himself suddenly deprived of his entire family. A greater calamity could not befall any one, and coming thus upon Dr. Seguin, calls forth the deepest and most heartfelt sympathy of his many friends. May he have the strength to bear this terrible affliction.

Topical Application of Alcohol.—In cases of polypous growths or granulations in the meatus of the ear, in the

cavity or on membrane of the tympanum, Politzer recommends alcohol very highly. Before employing it, it is essential to force out the purulent secretion from the cavity of the tympanum by means of air forced in by the Politzer apparatus and by syringing with tepid water. He speaks of it in the highest terms, and cites some cases as proof of the great efficacy of alcohol as a means, not only of removing these growths, but also of preventing their reappearance after various caustic solutions have been used in vain for this purpose. He directs that the alcohol, moderately warmed, be poured into the ear by a spoon, and permitted to remain from 10 to 15 minutes. Generally it causes only a sense of warmth. If severe pain, with a burning sensation, is produced, it should be diluted with an equal part of distilled water. It has proved wonderfully serviceable in diffused growths from the mucous membrane of the middle ear. In some such cases it must be continued for weeks or months.

Fatal Chloroform Anæsthesia.—A death occurred in Baltimore on the 15th ult. from this cause. A robust man, aged 49, and weighing about 200, employed in a foundry, had a dislocation of the proximal phalanx of the ring finger. About one drachm of Squibb's chloroform was administered on a towel folded, with the end open. Reduction was effected with ease, but during the anæsthesia the man sat up and struck violently at the physicians. He was laid down again, and immediately after was found to be dead. The whole thing occupied but three minutes. Auscultation revealed nothing wrong with the heart. The habits were very dissipated. No *post-mortem.—Maryland Medical Journal.*

Dr. J. J. Woodward, U. S. Army, has returned from Europe, and the profession will regret to learn that his health has not been improved by his trip.

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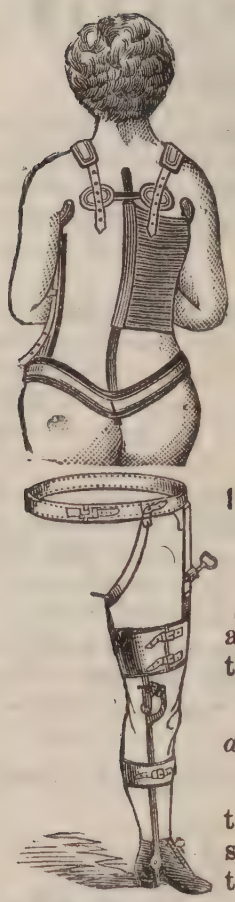

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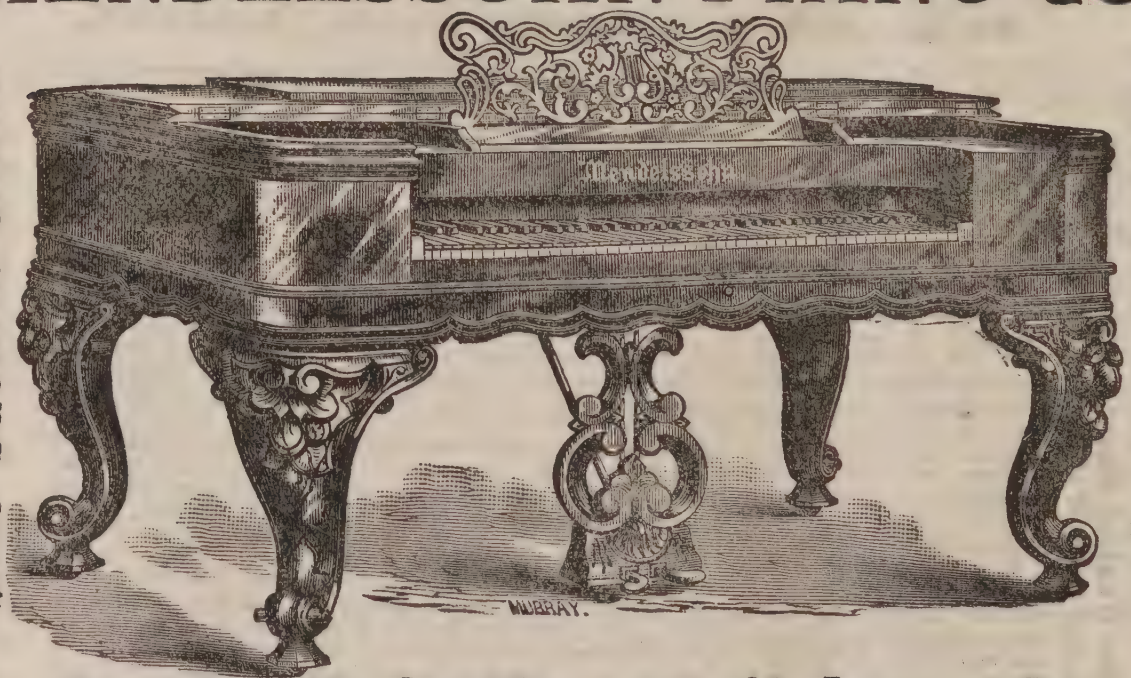

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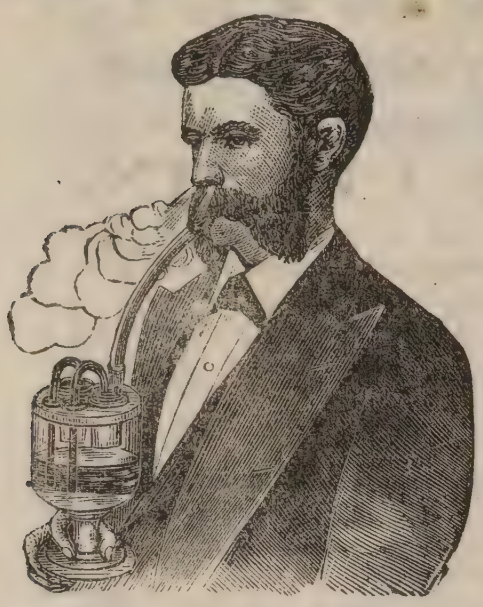

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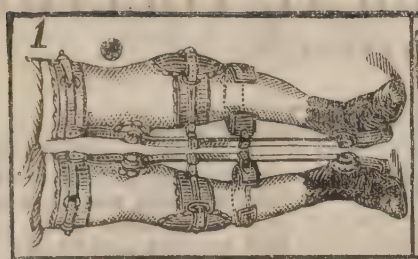

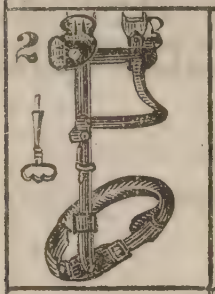

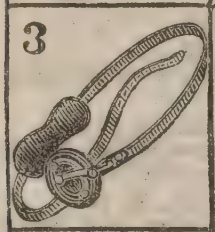

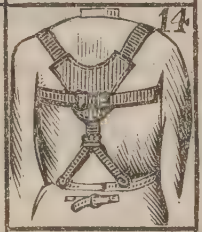

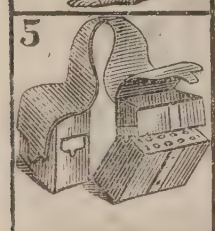

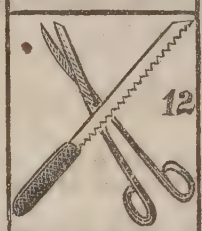

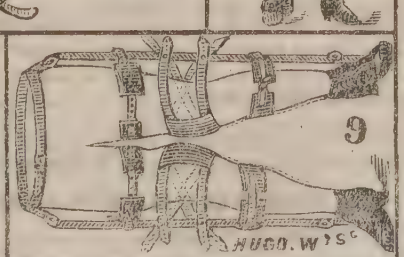

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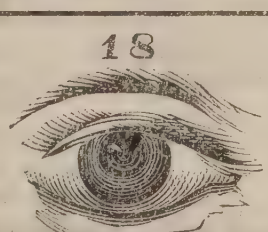

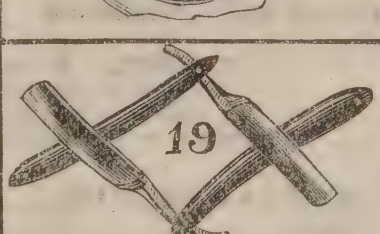

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RECENT INTRODUCTIONS TO THE MATERIA MEDICA,

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CHEKEN.

(*Eugenia Cheken, Myrtus Chekan.*) This remedy, a native of Chili, is very popular in that country, where it is employed as an *inhalation* in diphtheria, laryngitis, bronchitis, bronchorrhœa, etc.; as an *injection* in gonorrhœa, leucorrhœa, cystitis, etc.; and *internally* as an aid to digestion, to allay cough, to facilitate expectoration, and to stimulate the kidneys. It is also an astringent, and is said to be of great value in hæmoptysis.

Cheken (known also as Chekan and Chequen) was introduced to the profession of England through a report of results following its use in chronic bronchitis or winter cough by Wm. Murrell, M. D., M. R. C. P., Assistant Physician to the Royal Hospital for Diseases of the Chest, and Lecturer on Practical Physiology at the Westminster Hospital. Dr. Murrell's report is very favorable, and he has supplemented it by private advices to us expressing great satisfaction with the drug in the affections in which he has employed it. He regards it as one of the most valuable introductions of late years, and pronounces it a drug of very superior properties in the treatment of ***chronic bronchitis,*** acting in this affection both as an anodyne and exerting a favorable influence over the organic changes in the mucous membrane. It is certainly a remedy which merits a thorough trial at the hands of the profession of this country.

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("MOUNTAIN SAGE.") *Artemisia Frigida.* Fluid extract of the herb. Dose, one to two fluid drachms. **Diaphoretic and diuretic.**

The success which has attended the administration of this drug in "Mountain Fever" has suggested its employment in all febrile conditions attended with suppression of the secretions of the skin and kidneys. Its action in fever seems to be twofold, acting directly on the nervous center, thus inducing a direct lowering of the temperature, and facilitating the radiation of the heat through diaphoresis which it stimulates. Under its use the kidneys are also aroused to activity, and the solid constituents of the urine proportionately increased. Therapeutic tests have corroborated the opinion formed of it on theoretical grounds.

PERSEA.

(ALLIGATOR PEAR.) Fluid extract of the seeds. Dose, 30 to 60 minims. This remedy is now for the first time presented to the profession of this country. It is introduced on the recommendation of Dr. Henry Froehling, of Baltimore, Maryland, who, while acting in the capacity of botanist and scientist to an exploring expedition in Southern Mexico, became familiar with the drug, both from reports of the natives and personal experience, as a remedy in ***intercostal neuralgia.*** The following extract from Dr. Froehling's report will give some conception of the nature of this remedy:

"A common experience among physicians is that some cases of intercostal neuralgia are very troublesome and obstinate, resisting almost every kind of treatment; particularly is this the case in malarial districts. In such cases I would recommend the fluid extract of Persea seed. In my own person, and in every case in which I have employed it, I have been highly gratified with the result. Those of my medical friends to whom I have given samples of the preparation warmly endorse my opinion of it as above, and I can not but believe that further trial of it will cause it to be regarded as a valuable addition to our list of medicines."

Dr. Froehling also mentions the fact that Persea has been employed with benefit in the expulsion of tapeworm.

COCA.

(ERYTHROXYLON COCA.) The evidence in favor of Coca is to prove it a powerful nervous stimulant, through which property it retards waste of tissue, increases muscular strength and endurance, and removes fatigue and languor, due to prolonged physical or mental effort. While indicated in all conditions presenting these symptoms, it has an especial indication in the treatment of ***the opium and alcohol habits.*** In these deplorable conditions it has been found to possess extraordinay properties—relieving the sense of untold bodily and mental misery which follows the withdrawal of the accustomed stimulus, thus preventing a return to the narcotic, and affording an opportunity for building up the system by the administration of restorative tonics.

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To the Medical Profession.

LACTOPEPTINE

DEMONSTRATED SUPERIORITY OF LACTOPEPTINE

AS A DIGESTIVE AGENT.

Certificate of Composition and Properties of Lactopeptine, by PROF. ATTFIELD, PH.D., F. R. S., F. I. C., F. C. S., *Prof. of Practical Chemistry to the Pharmaceutical Society of Great Britain.*

LONDON, *May* 3, 1882.

Lactopeptine having been prescribed for some of my friends during the past five years—apparently with very satisfactory results—its formula, which is stated on the bottles, and its general characters, have become well known to me. But, recently, the manufacturer of this article has asked me to witness its preparation on a large scale, to take samples of its ingredients from large bulks and examine them and also mix them myself, and to prepare *Lactopeptine* from ingredients made under my own direction, doing all this with the object of certifying that *Lactopeptine* is what its makers profess it to be, and that its ingredients are in quality the best that can be obtained. This I have done, and I now report that the almost inodorous and tasteless pulverulent substance termed *Lactopeptine* is a mixture of the three chief agents which enable ourselves and all animals to digest food. That is to say, *Lactopeptine* is a skillfully prepared combination of meat-converting, fat-converting and starch-converting materials, acidified with those small proportions of acids that are always present in the healthy stomach; all being disseminated in an appropriate vehicle, namely, powdered sugar of milk. The acids used at the factory—lactic and hydrochloric—are the best to be met with and are perfectly combined to form a permanent preparation; the milk sugar is absolutely pure; the powder known as "diastase" or starch-digesting (bread, potato and pastry-digesting) material, as well as the "pancreatin," or fat-digesting ingredients, are as good as any I can prepare; while the pepsin is much superior to that ordinarily used in medicine. Indeed, as regards this chief ingredient, pepsin, I have only met with one European or American specimen equal to that made and used by the manufacturer of *Lactopeptine*. A perfectly parallel series of experiments showed that any given weight of acidified pepsin, alone, at first acts somewhat more rapidly than *Lactopeptine* containing the same weight of the same pepsin. Sooner or later, however, the action of the *Lactopeptine* overtakes and outstrips that of pepsin alone, due, no doubt, to the meat-digesting as well as the fat-digesting power of the pancreatin contained in the *Lactopeptine*. My conclusion is that *Lactopeptine* is a most valuable digesting agent, and superior to pepsin alone.

JOHN ATTFIELD.

LACTOPEPTINE contains all the agents of digestion that act upon food, from mastication to its conversion into chyle, thus combining all the principles required to promote a healthy digestion.

One of its chief features (and the one which has gained it a preference over all digestive preparations) is, that it precisely represents in composition the natural digestive juices of the stomach, pancreas and salivary glands, and will therefore readily dissolve all foods necessary to the recuperation of the human organism.

FORMULA OF LACTOPEPTINE.

Sugar of Milk.....	40 ounces.	Pancreatine.....	6 ounces.
Pepsin.....	8 ounces.	Veg. Ptyalin or Diastase,	4 drachms.
Lactic Acid.....	5 fl. drachms.		
Hydrochloric Acid..	5 fl. drachms.		

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